MHC-2500

SERVICE MANUAL

AEP Model
UK Model

- MHC-2500 is composed of following models. As for the service manual, it is issued for each component model, then, please refer to it.

COMPONENT MODEL NAME

RECEIVER	STR-H100
CD PLAYER	CDP-H300
CASSETTE DECK	TC-H500
SPEAKER SYSTEM	SS-H2500

SPECIFICATIONS

General

Power requirements	AEP, Italian model: 220 V AC, 50/60 Hz UK model: 240 V, 50 Hz
Power consumption	AEP, Italian model: 90 watts UK model: 160 watts
Supplied accessories	Remote commander RM-S100 (1) Sony SUM-3 (NS) batteries (2) Flat cord (1) AM loop antenna (1)

PARTS LIST

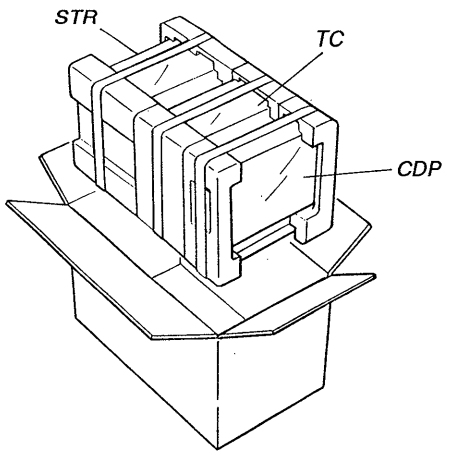
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- IT: Italian model.

ACCESSORY & PACKING MATERIAL

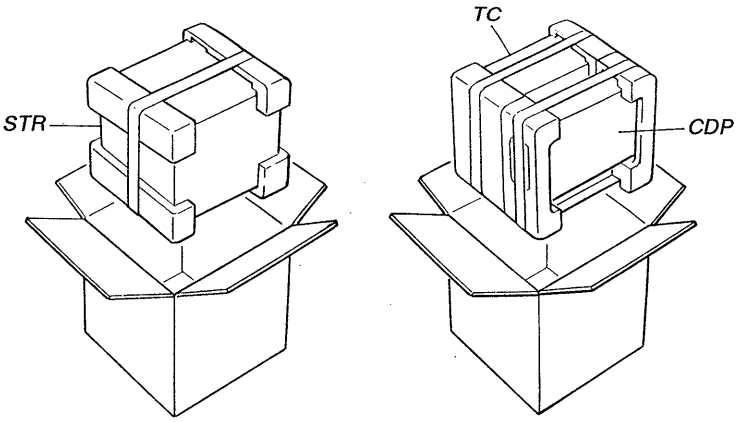
Part No.	Description
1-465-342-11	REMOTE COMMANDER(RM-S100)
1-501-369-11	ANTENNA
1-501-374-11	ANTENNA, LOOP
1-575-667-11	CORD WITH CONNECTOR
3-751-630-11	(AEP).....MANUAL, INSTRUCTION
3-751-630-41	MANUAL, INSTRUCTION
*3-354-980-01	CUSHION(for TC-H500)
*4-929-703-01	CUSHION(L) (for CDP-H300)
*4-929-704-01	CUSHION(R) (for CDP-H300)
*4-937-711-01	CUSHION(L) (for STR-H100)
*4-937-712-01	CUSHION(R) (for STR-H100)
4-910-323-01	SHEET, PROTECTION(for TC-H500)
4-920-941-01	SHEET, PROTECTION(for CDP-H300)
*4-936-881-01	(AEP:TYPE2, IT)...INDIVIDUAL CARTON(for CDP/TC)
*4-936-882-01	(AEP:TYPE1, UK)...INDIVIDUAL CARTON(for STR/CDP/TC)
*4-937-713-01	(AEP:TYPE2, IT)...INDIVIDUAL CARTON(for STR)

AEP MODEL PACKING FORM

TYPE 1



TYPE 2



MINI Hi-Fi COMPONENT SYSTEM

SONY®

English
90C0551-1
Printed in Japan

© 1990. 3

9-955-687-11

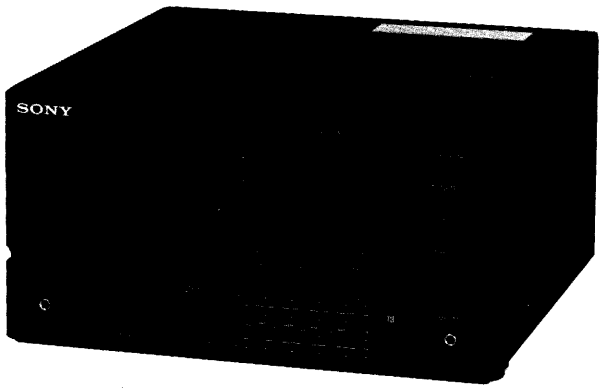
Sony Corporation
Audio Group

Published by Customer Relations and Service Group

STR-H100

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model



This set is receiver section in MHC-2500/FH-E626CD

SPECIFICATIONS

System	FM stereo, FM/AM superheterodyne tuner
FM tuner section	
Tuning range	87.5 – 108 MHz
Antenna terminals	75 ohms unbalanced, IEC connector
Intermediate frequency	10.7 MHz
AM tuner section	
Tuning range	AEP, UK model: MW: 531 – 1,602 kHz LW: 153 – 279 kHz Italian model: MW: 522 – 1,611 kHz LW: 144 – 288 kHz E, Saudi Arabia, Australian model: MW: 531 – 1,602 kHz SW1: 3.2 – 7.3 MHz SW2: 9.5 – 21.75 MHz
Antenna	AM loop antenna, External antenna terminals
Intermediate frequency	450 kHz

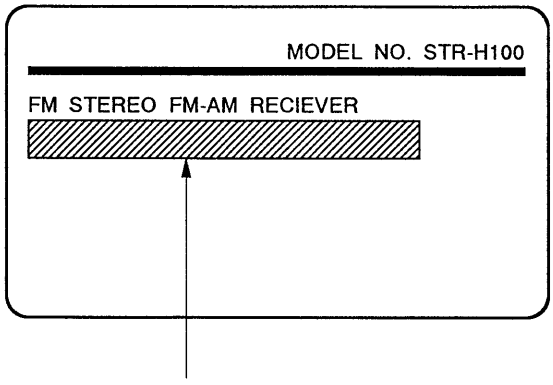
Amplifier Section	
Continuous RMS power output	30 + 30 watts (6 ohms at 1 kHz, 5% THD)
Inputs	MIX MIC (minijack): sensitivity 1 mV, impedance 600 ohms PHONO (phono jacks): sensitivity 5 mV, impedance 47 kilohms
Outputs	HEADPHONES (stereo minijack): accepts headphones of 8 ohms or more. SPEAKER: accepts speakers of 6 to 16 ohms.
Dimensions	Approx. 225 × 118 × 262 mm (w/h/d) (9 × 4 3/4 × 10 3/8 inches)
Weight	Approx. 4 kg (8 lb 13 oz)

FM STEREO FM-AM RECEIVER

SONY®

MODEL IDENTIFICATION

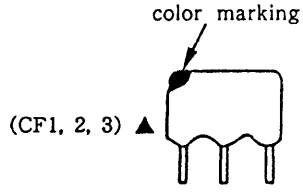
– Specification Label –



AEP, Italian model: AC: 220 V~50/60 Hz
UK model: AC: 240 V~50 Hz
E, Saudi Arabia, Australian model:
AC: 120/220/240 V~50/60 Hz 110 W

Note on Ceramic Filter (CF1, 2, 3) ▲ Replacement.

This set employs three ceramic filters (CF1, 2, 3) ▲ which should have the same color marking to identify their center frequency. Therefore FM IF offset adjustment by * D513, * D514 is necessary to match the center frequency of the ceramic filters used with FM intermediate frequency.



○ : Mounted
× : not Mounted

Ceramic filter		Mount		FM intermediate frequency (MHz)
Color mark	Center frequency (MHz)	* D513	* D514	
White	10.750	○	×	10.750
Red	10.700	○	○	10.700
Black	10.650	×	○	10.650

FM intermediate frequency is determined by the three types as shown above, Ceramic filters of same center frequency, i. e., of same color coding should be used for CF1, CF2 and CF3.

When replacing the ceramic filters, perform the FM Discriminator Adjustment.

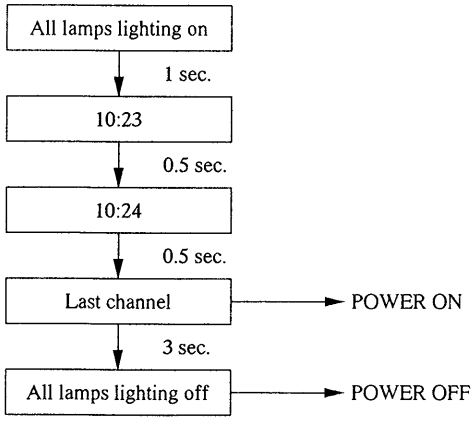
▲: AEP, UK, E, Saudi Arabia, Australian model: CF1, 2
Italian model: CF1, 2, 3

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

- **Service mode for checking the timer ON/OFF**

1) Set the SYSTEM POWER switch to the state of STANDBY.
2) Set the timer of tuner to a proper time (any time).
3) Press 3 switches simultaneously, namely, TIMER/TUNER PRESET [+], ○ Band and ○ MODE.
4) FL-tube display



5) End

- **Reset of IC501**

The display controller IC501 is reset by checking the timer ON/OFF.
After resetting, the following frequencies are pre-set to the memory.
When the repair is completed, return the memory to the preceding state (content).

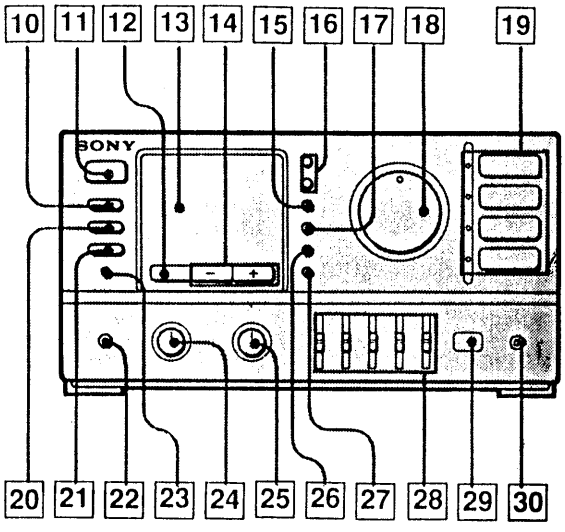
AEP, UK, Italian model

FM	MW		LW	
	AEP, UK model	Italian model	AEP, UK model	Italian model
A1 87.5 MHz	A6 531 kHz	A6 522 kHz	B1 153 kHz	B1 144 kHz
A2 88.0 MHz	A7 603 kHz	A7 603 kHz	B2 162 kHz	B2 162 kHz
A3 98.0 MHz	A8 999 kHz	A8 999 kHz	B3 216 kHz	B3 216 kHz
A4 106.0 MHz	A9 1,404 kHz	A9 1,404 kHz	B4 270 kHz	B4 270 kHz
A5 108.0 MHz	A0 1,602 kHz	A0 1,611 kHz	B5 279 kHz	B5 288 kHz

E, Saudi Arabia, Australian model

FM	MW	SW
A1 87.5 MHz	A6 531 kHz	B1 5.95 MHz
A2 88.0 MHz	A7 603 kHz	B2 7.0 MHz
A3 98.0 MHz	A8 999 kHz	B3 12.0 MHz
A4 106.0 MHz	A9 1,404 kHz	B4 17.0 MHz
A5 108.0 MHz	A0 1,602 kHz	B5 17.9 MHz

Parts Identification



Receiver Section B

10 TIMER CONTROL button
11 SYSTEM POWER switch
12 SHIFT (memory page select) button
13 Display window
14 TUNER PRESET/TIMER –/+ buttons
15 BAND selector
16 TUNING –/+ buttons
17 MODE selector
18 VOLUME control
19 Function selectors
20 SLEEP timer button
21 TIMER SET button
22 HEADPHONES jack (stereo minijack)
23 CLOCK set button
24 DBFB control (SAT control: E, Saudi Arabia, Australian model)
25 BALANCE control
26 MEMORY button
27 ENTER/NEXT button
28 5-band stereo graphic equalizer
29 Remote control detector
30 MIX MIC (microphone) jack (mini-jack)

Clock Setting

Setting the Clock

Example: Set to 9:25 in the morning.
When the AC power cord is connected, the display shows 0:00.

1 **Press CLOCK.**

2 **Set the hour with TUNER PRESET/ TIMER +/– buttons.**

3 **Press ENTER/NEXT.**

4 **Set the minute with TUNER PRESET/ TIMER +/– buttons.**

5 **Press ENTER/NEXT.**
The clock starts operating.

When a power interruption occurs

The power is backed up for approximately 30 minutes. If the power is recovered within 30 minutes, there is no need to reset the clock and timer. If it is longer than 30 minutes, both the clock and timer settings are erased, and "0:00" will flash on the display.

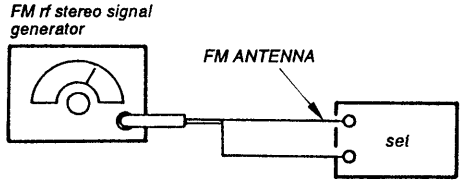
SECTION 2
ADJUSTMENTS

- **Saudi: Saudi Arabia**
  Aus: Australian
  IT: Itarian

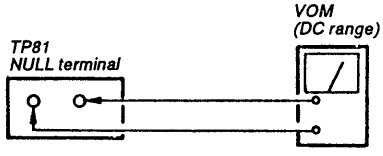
FM SECTION

• FM DISCRIMINATOR ALIGNMENT (NULL CHECK)

Setting:



Carrier frequency: 98 MHz
Output level: 60 dBμ(1 mV)
Modulation : 1 kHz, 75 kHz deviation (E, Saudi, Aus)
1 kHz, 40 kHz deviation (AEP, UK, IT)



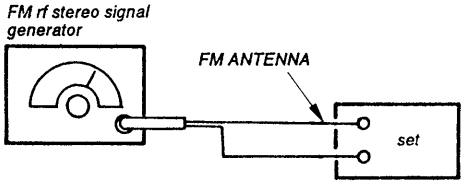
Procedure:

1. Tune the set to 98 MHz.
2. Adjust IFT82 for 0 V reading on the VOM.

Note: FM TUNING LEVEL adjustment should be made after FM discriminator alignment.

• FM TUNING LEVEL ADJUSTMENT

Setting:



Carrier frequency: 98 MHz
Output level: 30dBμ(0.032 mV)
Modulation : 1 kHz, 75 kHz deviation (E, Saudi, Aus)
1 kHz, 40 kHz deviation (AEP, UK, IT)

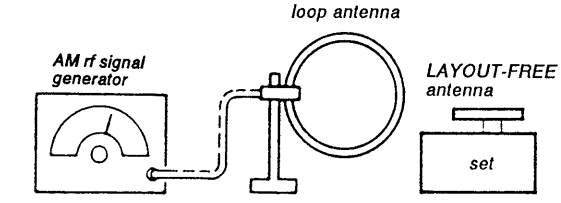
Procedure:

1. Tune the set to 98 MHz.
2. Adjust RV81 so that the TUNED LED goes on.

MW SECTION

• MW TUNING LEVEL ADJUSTMENT

Setting:



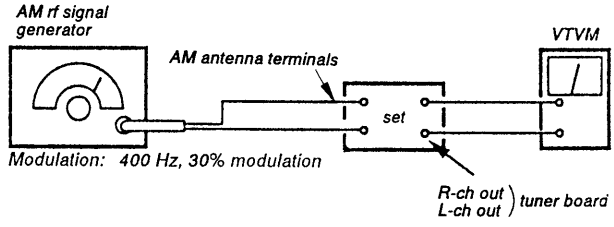
Carrier frequency: 999 kHz
Modulation: 400 Hz, 30% modulation

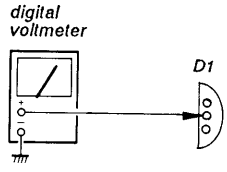
Procedure:

1. Set loop antenna so that the LAYOUT-FREE antenna input level becomes 58 dBμ (0.79 mV).
2. Tune the set to 999 kHz.
3. Adjust the RV82 so that the TUNED LED goes on.

SW SECTION (E, Saudi Arabia, Australian)

Setting:





• SW CONTROL VOLTAGE ADJUSTMENT (FREQUENCY COVERAGE ADJUSTMENT)

Procedure:

1. Connect digital voltmeter to diode D1 center lead and ground.
2. Adjust for a following value reading on digital voltmeter.

	Set frequency	Adjustment part	Reading on digital voltmeter
SW	f min. 5.95 MHz	L3	1.05V
	f max. 17.9 MHz	CT2	8.7V

- **SW TRACKING ADJUSTMENT**

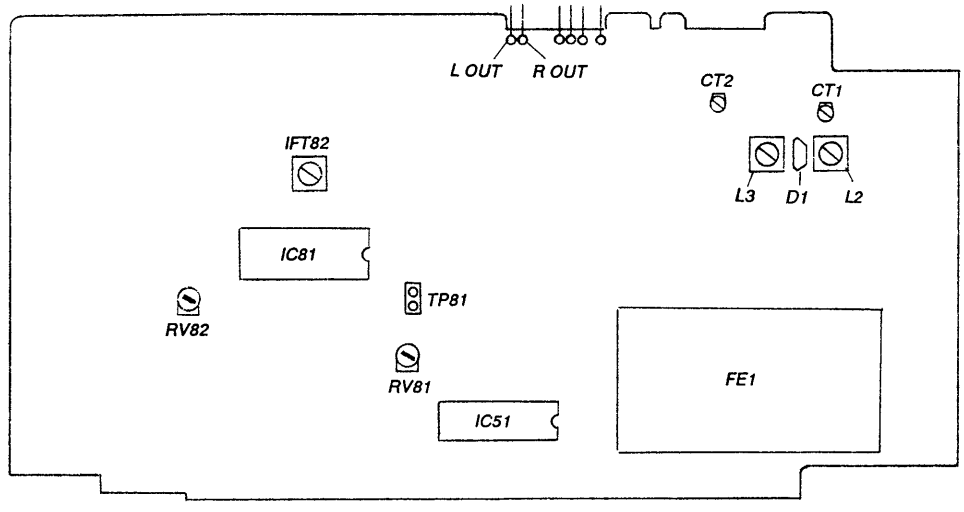
Procedure:
Adjustment for a maximum reading on VTVM.

	Set and SG frequency	Adjustment part
SW	f low. 7.0 MHz	L2
	f high. 17.0 MHz	CT1

- Repeat the procedures is each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

[Parts Arrangement Diagram for Adjustments]

TUNER BOARD
– Component Side –



SECTION 3
DIAGRAMS

E, Saudi Arabia, Australian model

3-1. TUNER SECTION PRINTED WIRING BOARDS

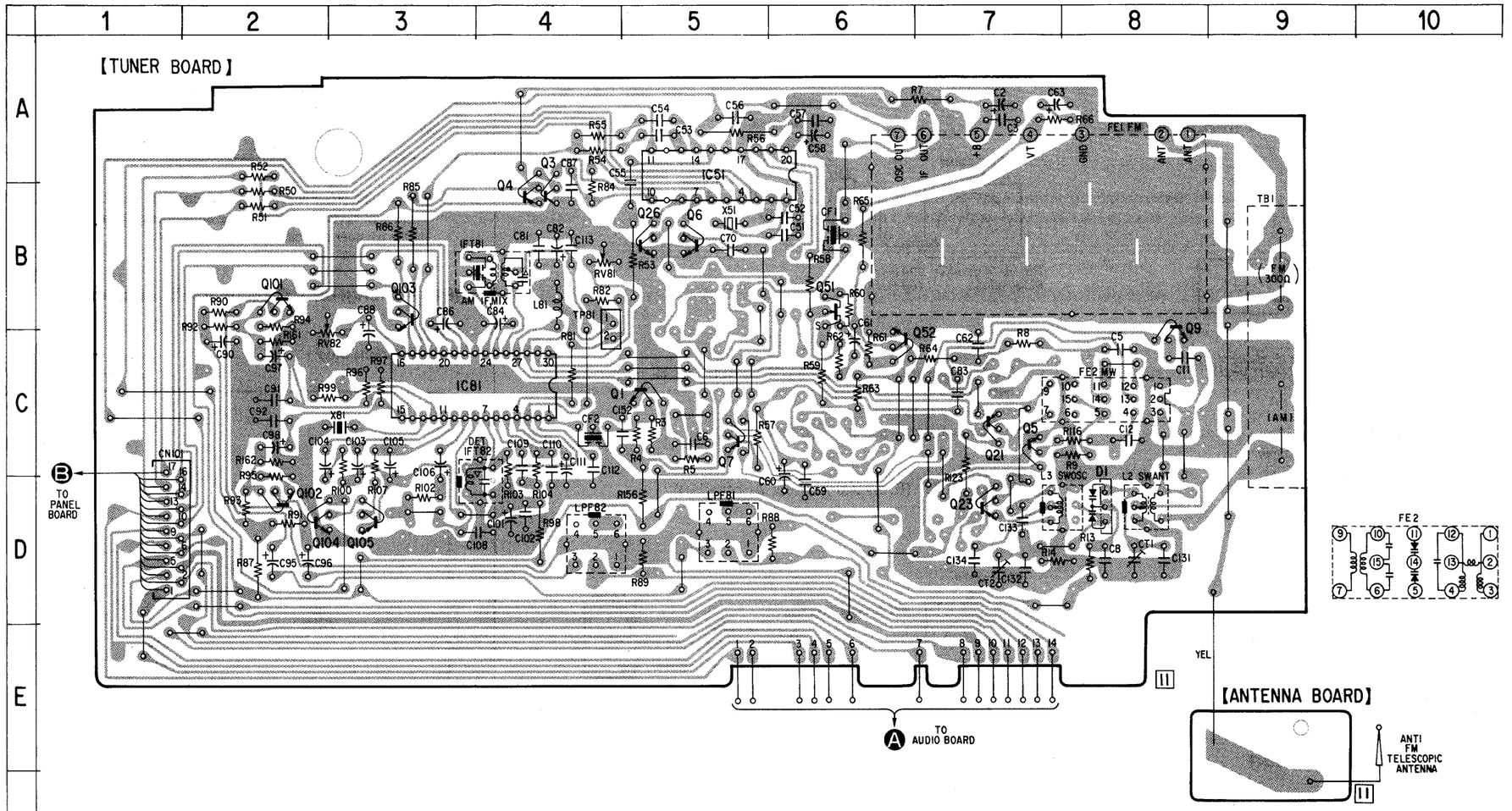
- **Semiconductor Location**

E, Saudi Arabia, Australian

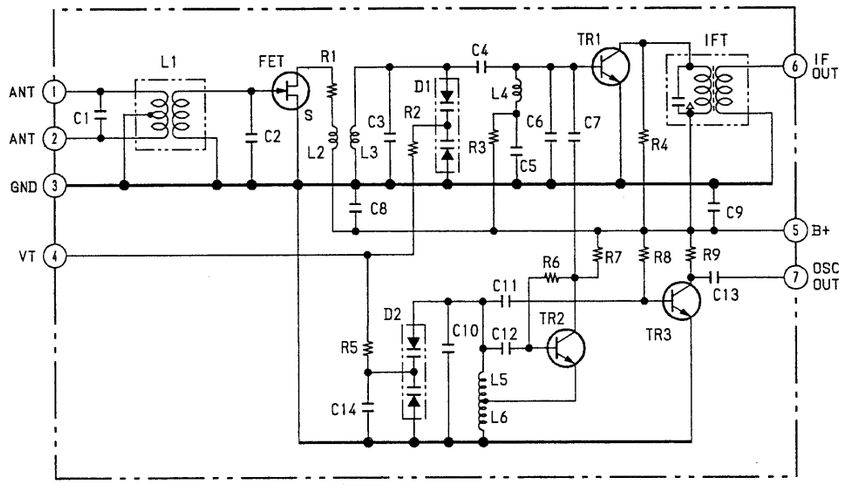
Ref. No.	Location
D1	D-8
IC51	A-5
IC81	C-3
Q1	C-4
Q3	A-4
Q4	B-4
Q5	C-7
Q6	B-5
Q7	C-5
Q9	C-8
Q21	C-7
Q23	D-7
Q26	B-5
Q51	B-6
Q52	C-7
Q101	B-2
Q102	D-2
Q103	B-3
Q104	D-2
Q105	D-3

Note:

- ○——— : parts extracted from the component side.
- ⬚ : indicates side identified with part number.

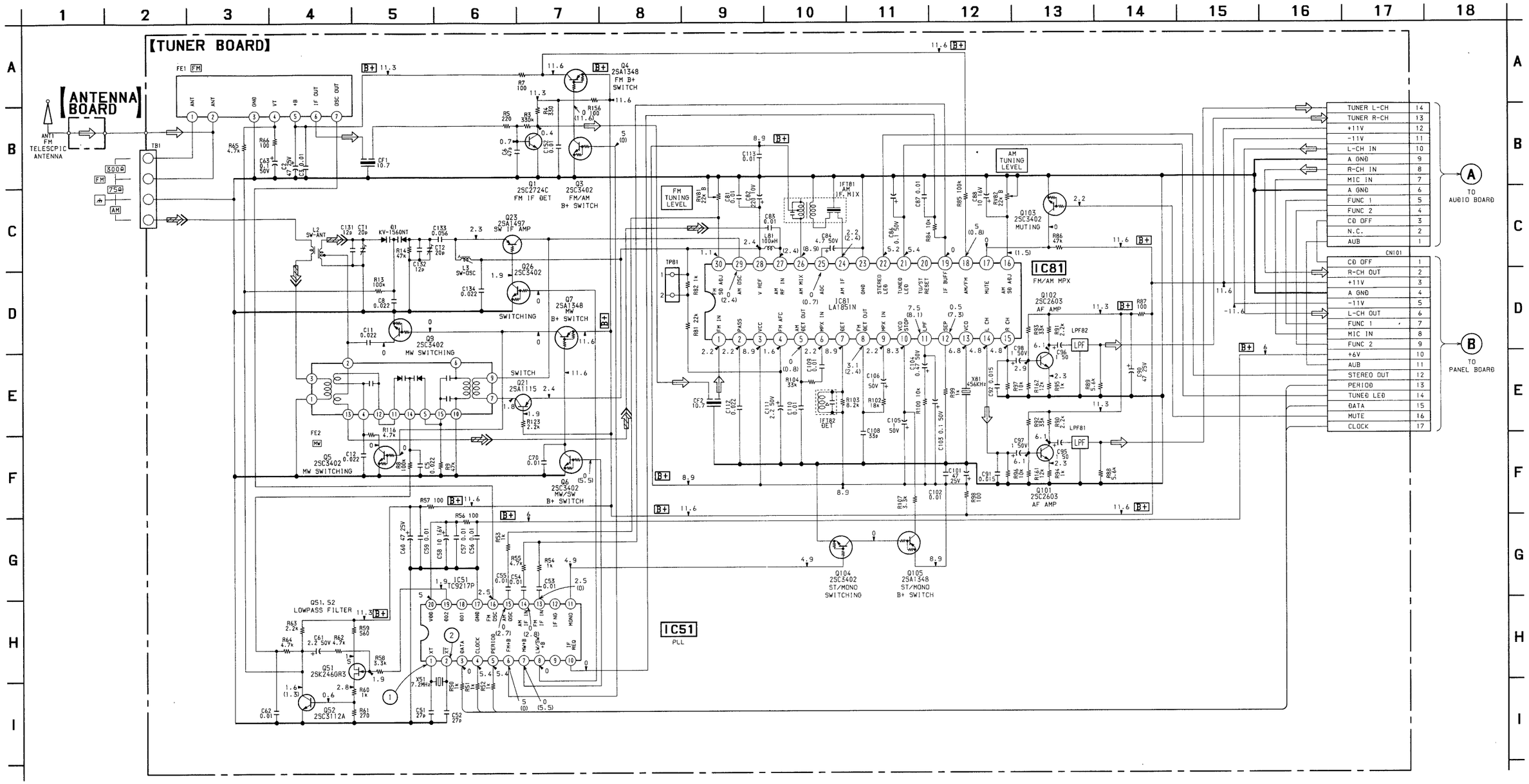


• FE1 FRONT-END



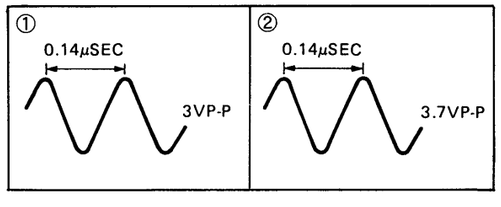
E, Saudi Arabia, Australian model

3-2. TUNER SECTION SCHEMATIC DIAGRAM



Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- △ : internal component.
- ▭ : adjustment for repair.
- Circled numbers refer to wavefroms.
- B+ : B + Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : AM
- Voltages are taken with a VOM (Input impedance 10 MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Wavefroms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
  ⇛ : AM



AEP, UK, Italian model

3-3. TUNER SECTION PRINTED WIRING BOARD

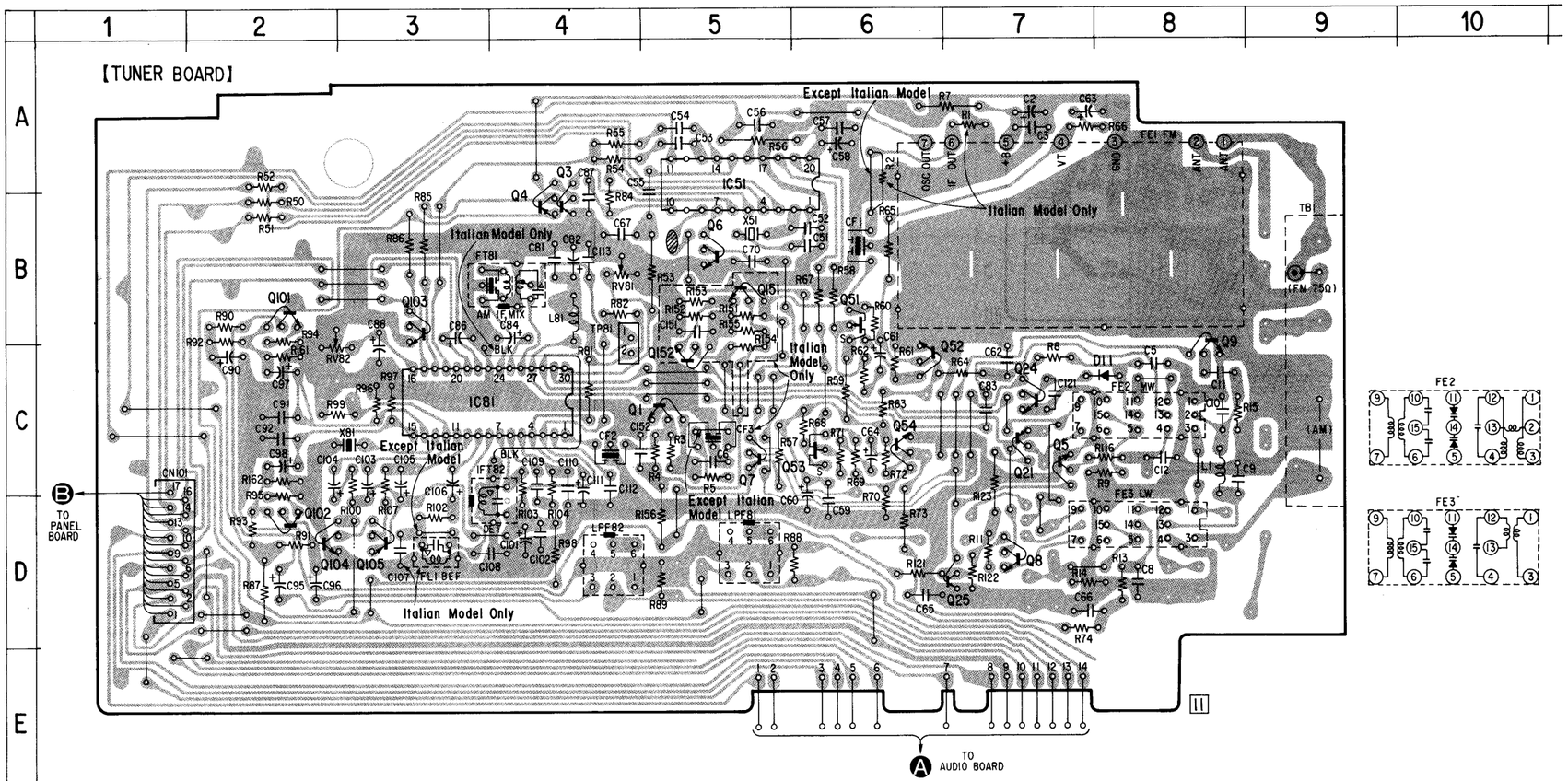
- **Semiconductor Location**

AEP, UK, Italian

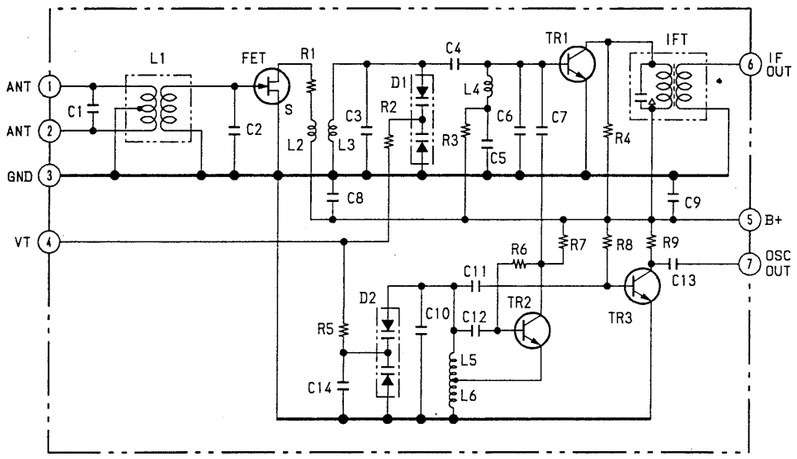
Ref. No.	Location
D11	C-8
IC51	A-5
IC81	C-3
Q1	C-4
Q3	A-4
Q4	B-4
Q5	C-7
Q6	B-5
Q7	C-5
Q8	D-7
Q9	C-8
Q21	C-7
Q24	C-7
Q25	D-7
Q51	B-6
Q52	C-7
Q53	C-6
Q54	C-6
Q101	B-2
Q102	D-2
Q103	B-3
Q104	D-2
Q105	D-3
Q151	B-5
Q152	C-5

Note:

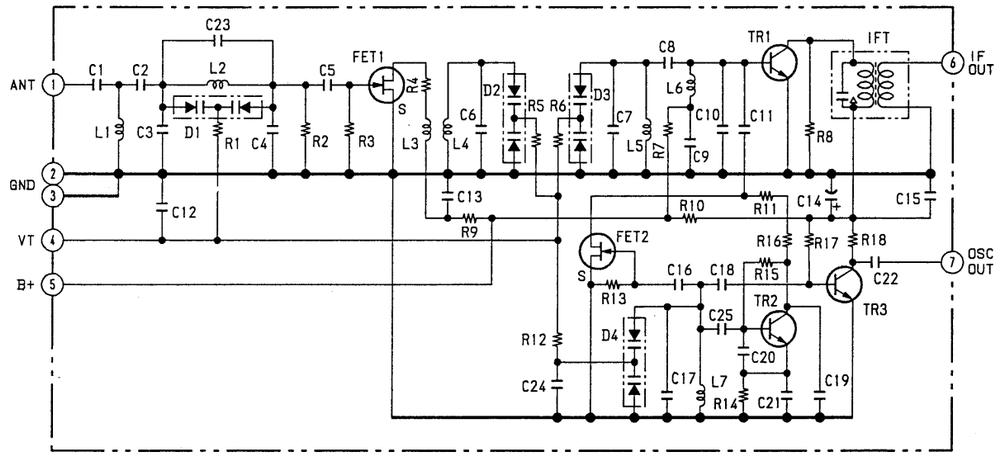
- ○—— : parts extracted from the component side.
- —— : parts extracted from the conductor side.
- ⊡← : indicates side identified with part number.



- **FE1 FRONT-END (AEP, UK model)**

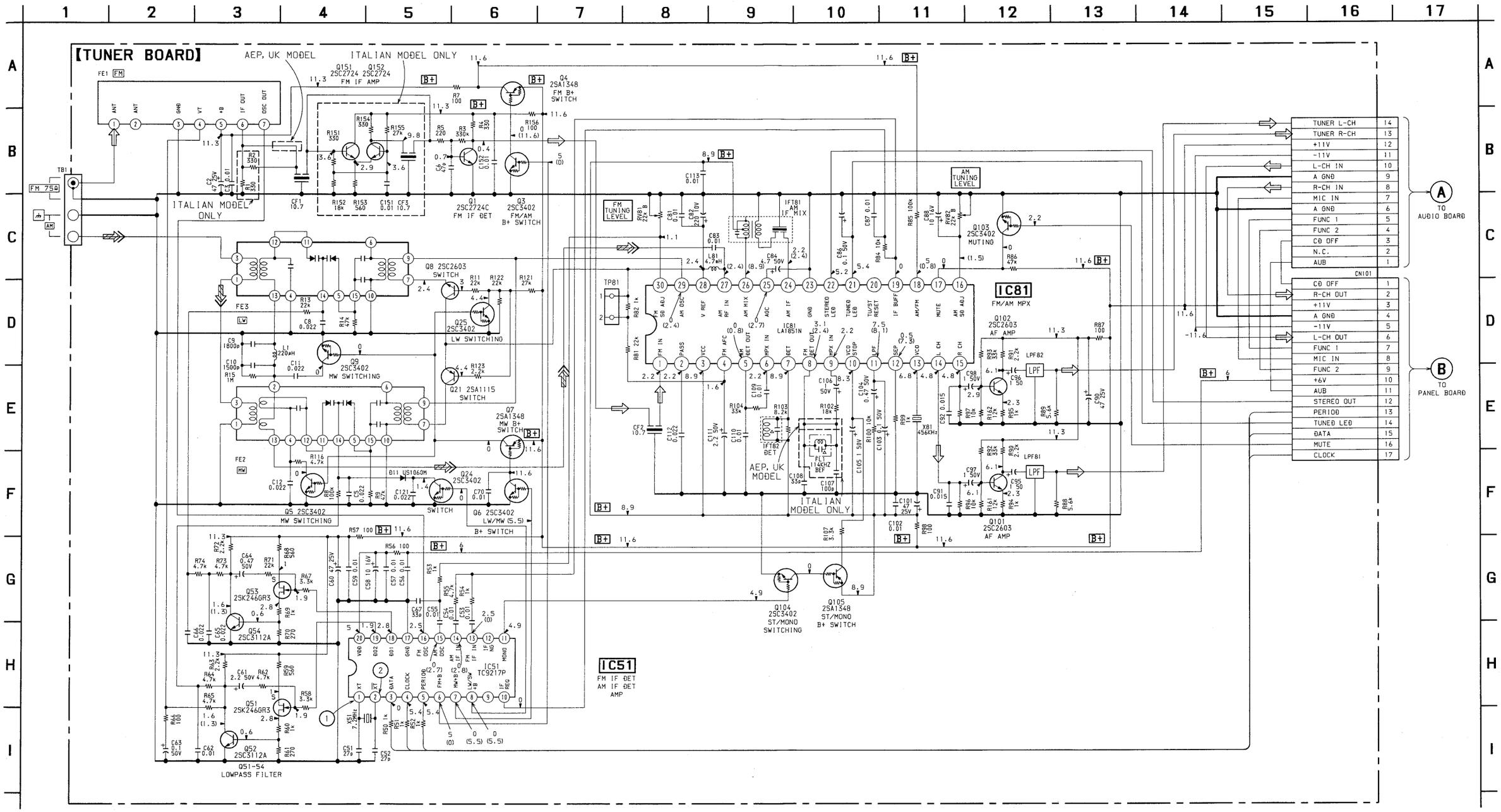


(Itarian model)



AEP, UK, Italian model

3-4. TUNER SCHEMATIC DIAGRAM



Note:

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- △ : internal component.
- ▭ : adjustment for repair.
- Circled numbers refer to wavefroms.
- B+ : B + Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
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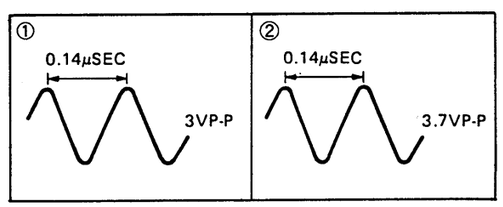
- Voltages are taken with a VOM (Input impedance 10 MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Wavefroms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
  ⇛ : AM



3-5. SEMICONDUCTOR LEAD LAYOUTS

M5F7806

M5218AL
M5236L

STK4132MK2
STK4142MK2

DTA114ES
DTA114TS
DTC114ES
2SC2603-EF
2SC2724-CD

2SA1175-HFE

2SB1187-EF

2SC3112-A
2SC3623A-L
2SD1387

2SD1761-EF

2SK246-GR3

KV-1560NT

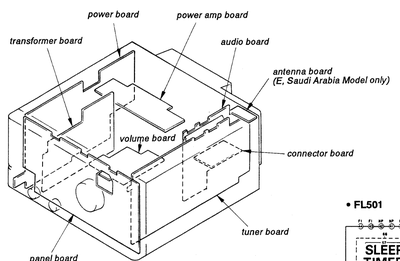
RBA-402

SEL1210W

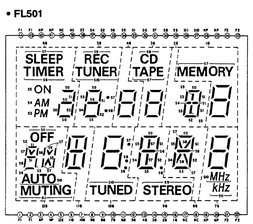
UZP-6.8BC

HZS30-2L
1SS120
11ES2

3-6. CIRCUIT BOARDS LOCATION



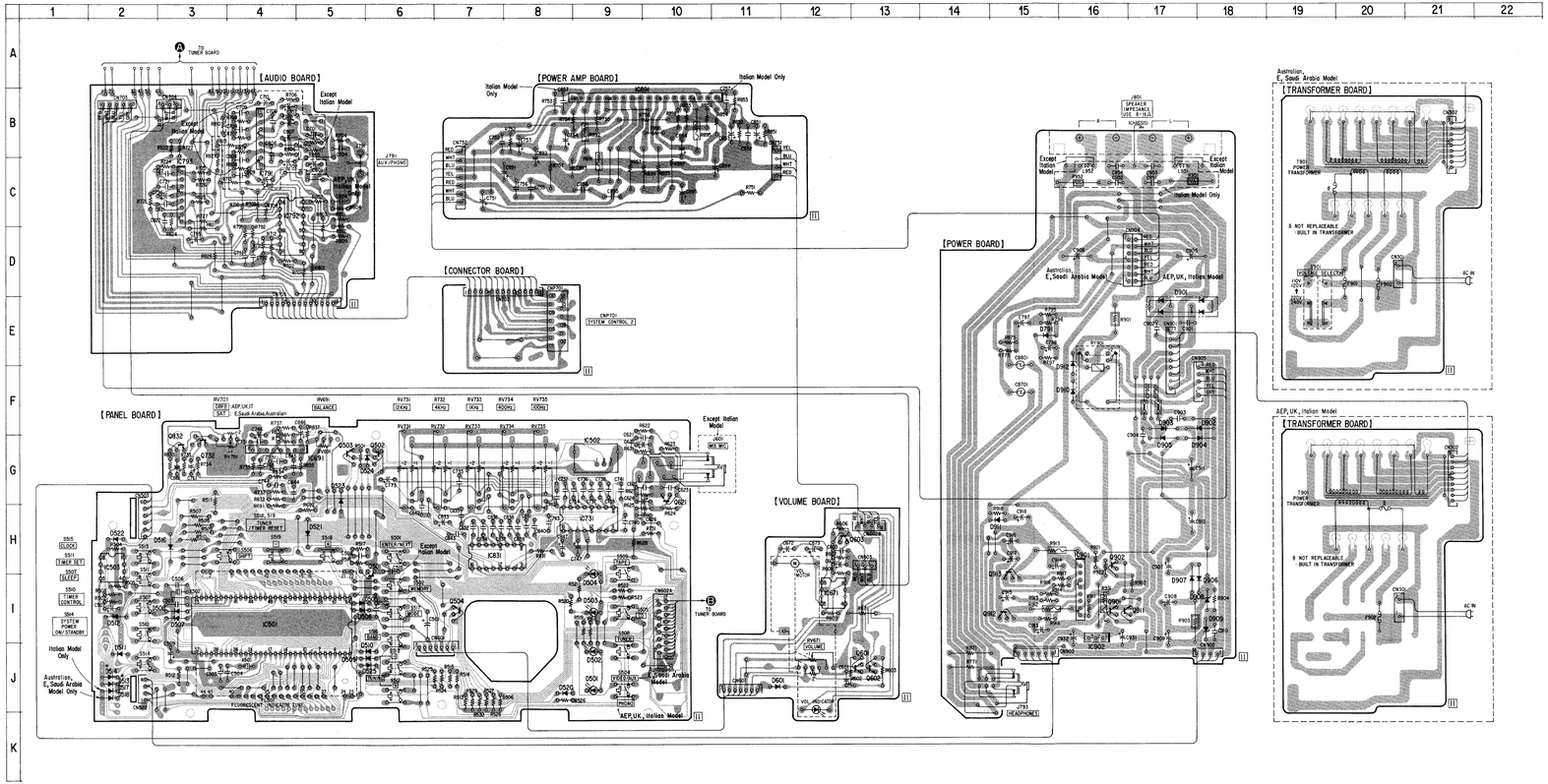
• FL501



3-7. MAIN SECTION PRINTED WIRING BOARDS

• Semiconductor Location

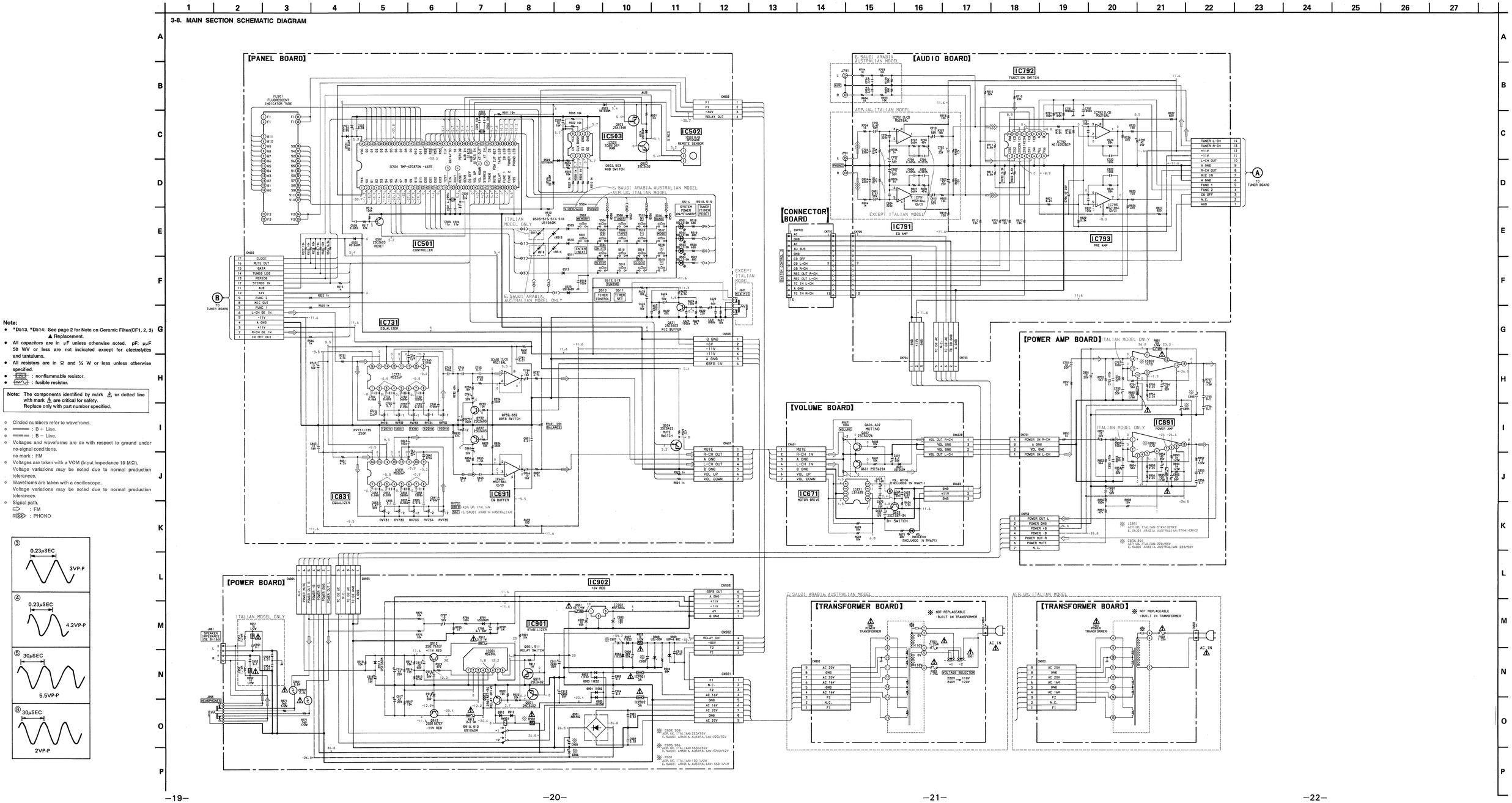
Ref. No.	Location
D501	J-9
D502	J-9
D503	I-9
D504	I-9
D505	I-6
D506	I-5
D507	I-3
D508	I-2
D509	J-5
D510	J-5
D511	J-2
D512	I-2
D513	J-2
D514	J-2
D516	H-3
D517	J-2
D518	J-2
D520	J-8
D521	H-5
D522	H-2
D523	G-5
D524	G-5
D525	J-5
D601	J-11
D602	J-12
D791	E-15
D901	D-17
D902	F-18
D903	F-17
D904	G-17
D905	G-17
D906	I-18
D907	I-17
D908	I-17
D909	I-18
D910	F-16
D911	H-15
D912	F-16
IC501	I-4
IC502	G-9
IC503	H-2
IC671	I-12
IC691	G-5
IC731	H-9
IC791	C-4
IC792	C-4
IC793	C-3
IC831	H-7
IC891	B-9
IC901	H-16
IC902	J-16
Q501	H-6
Q502	G-6
Q503	G-5
Q504	I-7
Q601	J-13
Q602	J-13
Q603	H-13
Q621	C-10
Q732	G-3
Q832	G-3
Q901	I-16
Q902	H-16
Q911	I-17
Q912	I-14
Q913	I-15


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
A B C D E F G H I J K
[AUDIO BOARD]
[POWER AMP BOARD]
[CONNECTOR BOARD]
[PANEL BOARD]
[VOLUME BOARD]
[POWER BOARD]
[TRANSFORMER BOARD]
Except Italian Model
Italian Model Only
Australian, E, Saudi Arabia Model
AEP,UK, Italian Model
TUNER BOARD
PHONES

Note:

- *DS13, *DS14: See page 2 for Note on Ceramic Filter (CF1, 2, 3)
  ▲ Replacement.
- ○—— : parts extracted from the component side.

3-8. MAIN SECTION SCHEMATIC DIAGRAM



Note:

- *D513, *D514: See page 2 for Note on Ceramic Filter(CF1, 2, 3)
- ▲ Replacement.
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- : nonflammable resistor.
- : fusible resistor.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- Circled numbers refer to waveforms.
- : B + Line.
- : B − Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Signal path.
  : FM
  : PHONO

③ 0.23μSEC 3VP-P

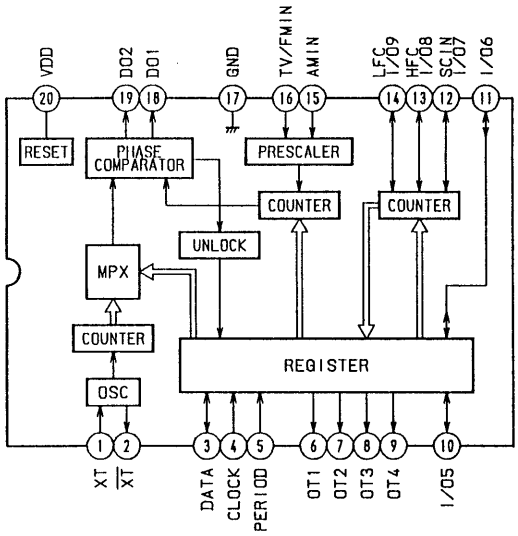
④ 0.23μSEC 4.2VP-P

⑤ 30μSEC 5.5VP-P

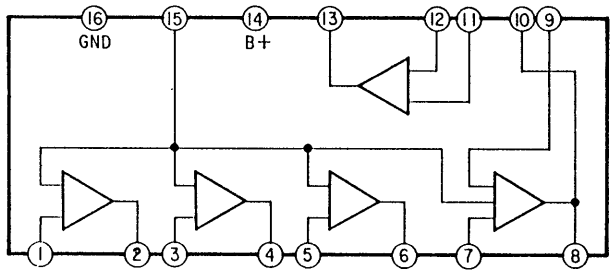
⑥ 30μSEC 2VP-P

3-9. IC BLOCK DIAGRAM

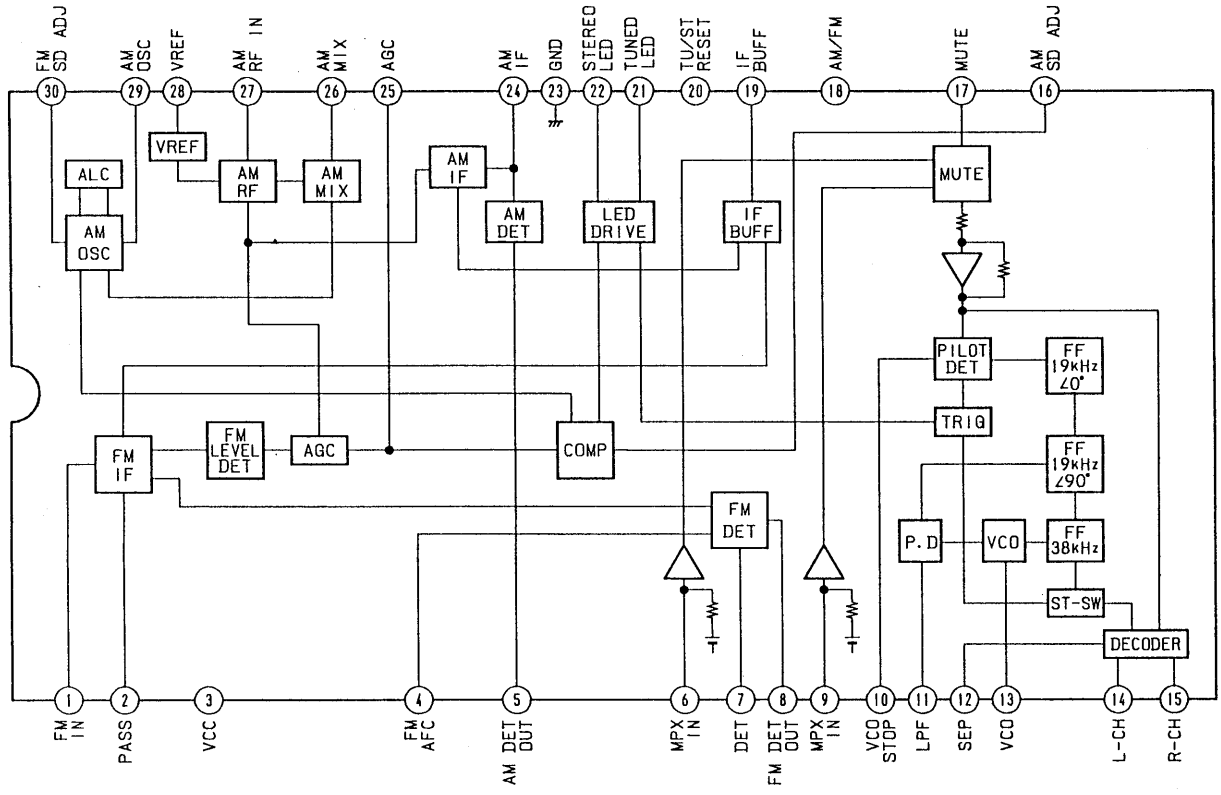
IC51 TC9217P



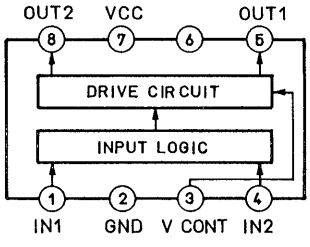
IC731, 831 M5226P



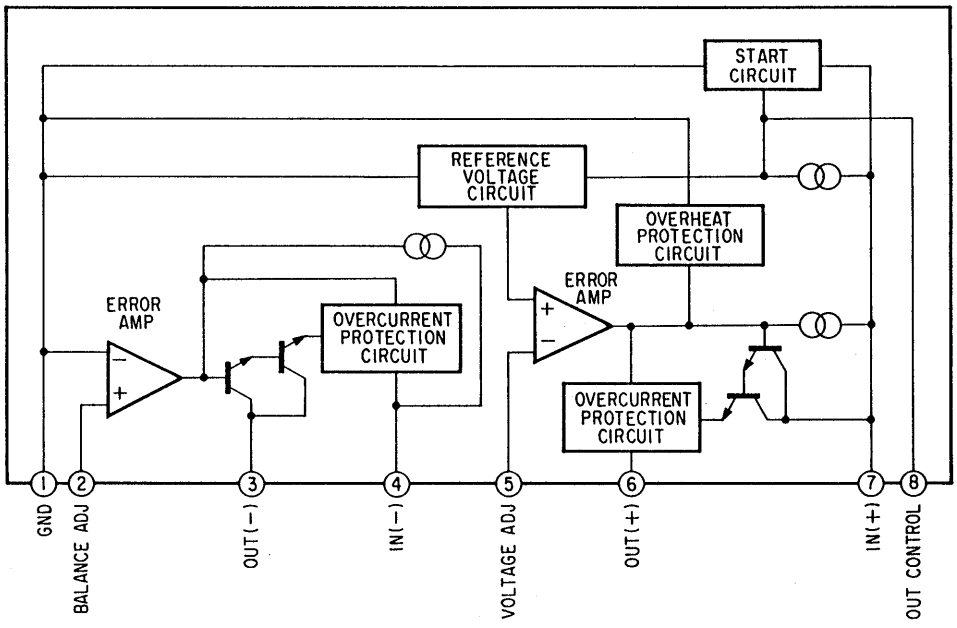
IC81 LA1851N



IC671 LB1639



IC901 M5230M



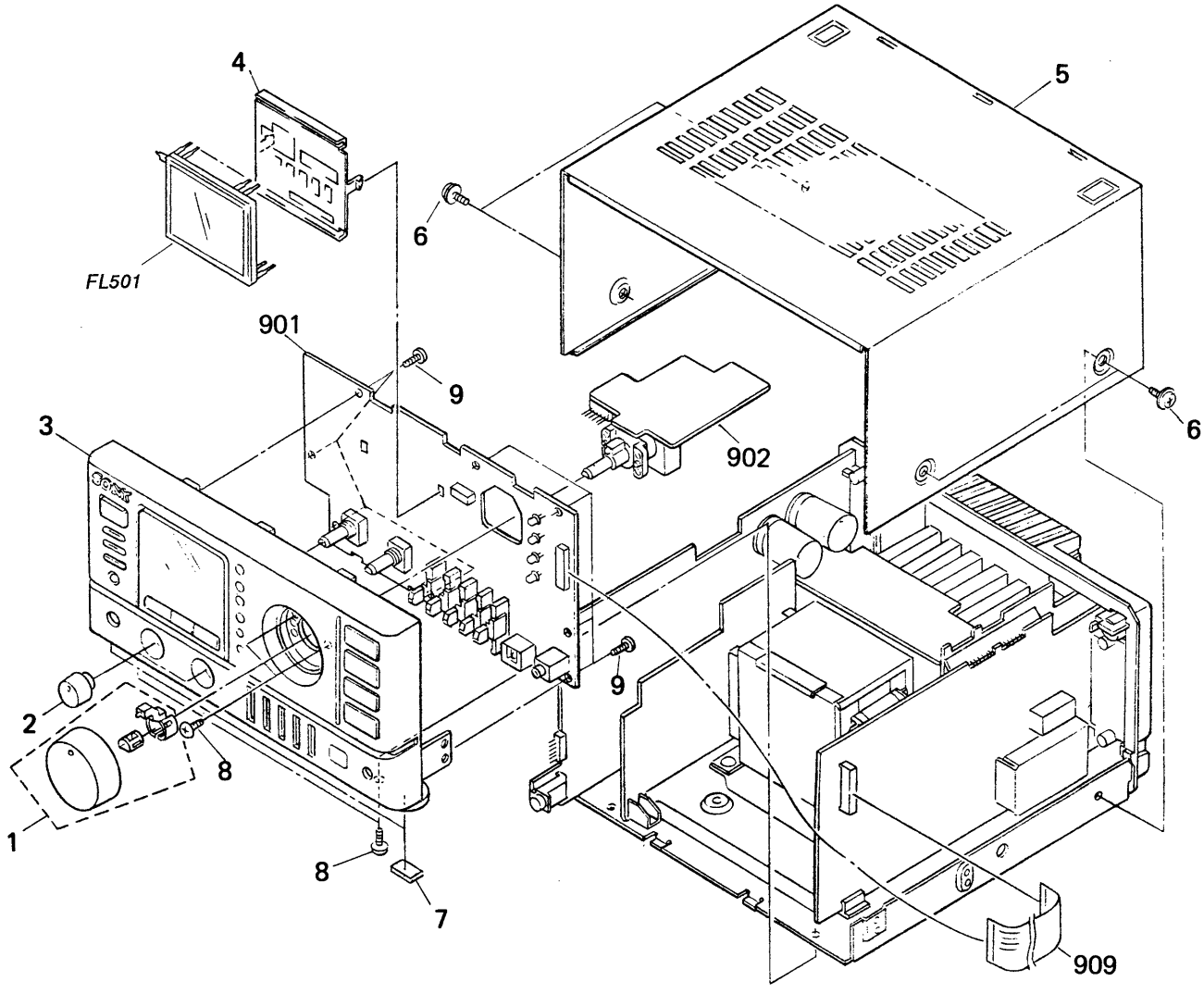
SECTION 4
EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ ↑
  Cabinet's Color Parts Color

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

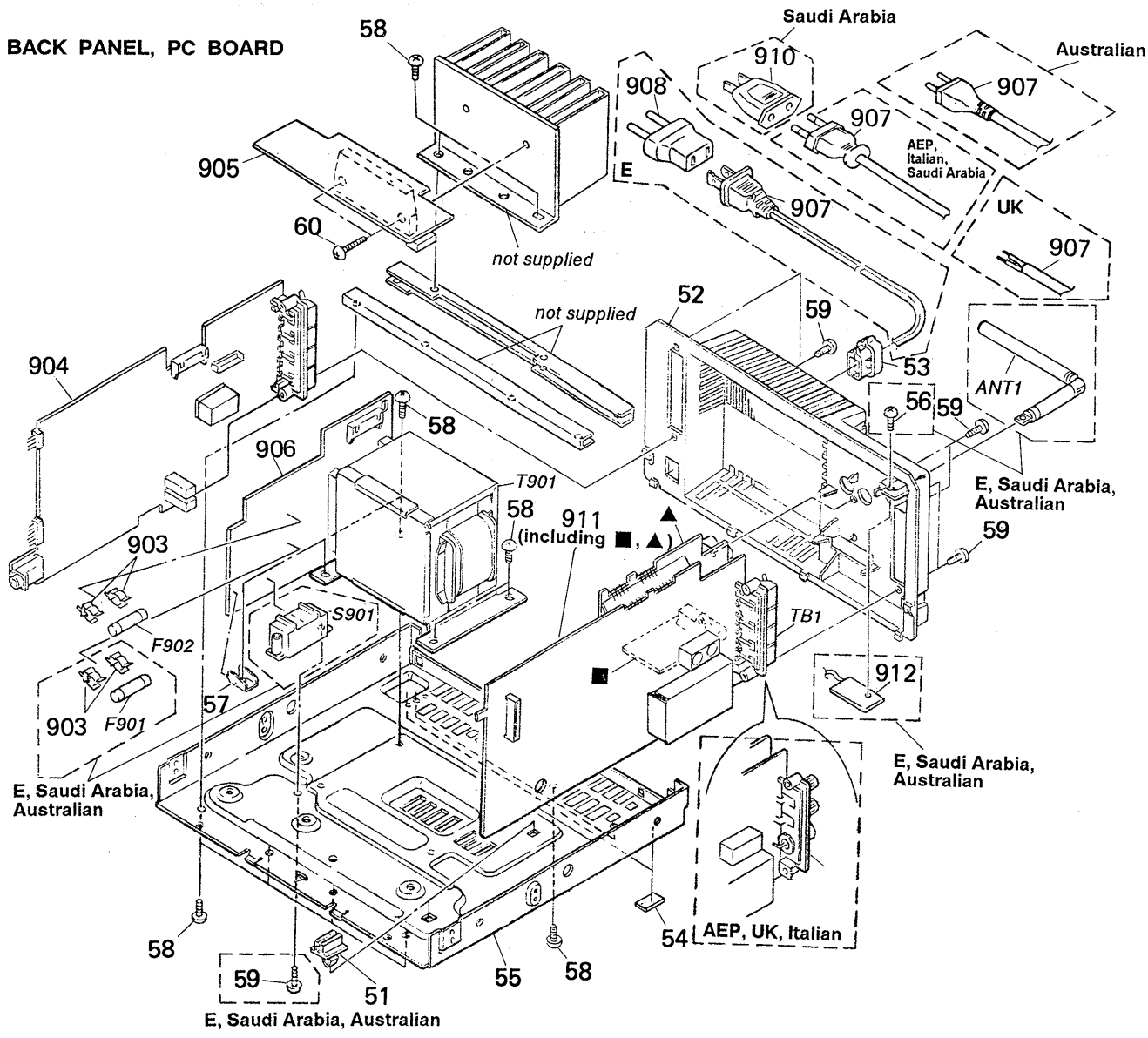
4-1. CASE, FRONT PANEL



No.	Part No.	Description	Remarks
1	X-4936-803-1	KNOB (VOLUME) ASSY	
2	4-930-323-01	KNOB	
3	X-4937-701-1	(AEP,UK,Italian)...PANEL ASSY, FRONT	
	X-4937-702-1	(E,Saudi Arabia,Australian) ...PANEL ASSY, FRONT	
4	4-937-723-01	HOLDER (FL)	
5	4-932-841-01	(AEP,UK,Italian)...CASE	
	4-932-841-11	(E,Saudi Arabia,Australian)...CASE	
6	3-704-366-01	SCREW (CASE) (M3X8)	
7	4-930-336-01	FOOT (FELT)	
8	7-682-547-04	SCREW +BVTT 3X6 (S)	
9	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	

No.	Part No.	Description	Remarks
901	*A-4334-433-A	(AEP,UK).....MOUNTED PCB, PANEL	
	*A-4334-445-A	(Italian).....MOUNTED PCB, PANEL	
	*A-4334-451-A	(E,Saudi Arabia,Australian) ...MOUNTED PCB, PANEL	
902	*1-634-752-11	PC BOARD, VOL	
909	1-575-733-11	WIRE, FLAT TYPE (17 CORE)	
FL501	1-519-573-11	INDICATOR TUBE, FLUORESCENT	

4-2. BACK PANEL, PC BOARD



No.	Part No.	Description	Remarks
51	*3-642-310-00	HOLDER, CIRCUIT BOARD	
52	*4-937-724-01	(AEP,UK,Italian)...PANEL, BACK	
	*4-937-724-11	(E,Saudi Arabia,Australian) ...PANEL, BACK	
53	*3-703-244-00	(EXCEPT E)...BUSHING (2104), CORD	
	*3-703-571-00	(E).....BUSHING (S)(4516), CORD	
54	4-930-336-01	FOOT (FELT)	
55	*4-932-854-11	(AEP,UK,Italian).....CHASSIS	
	*4-932-854-21	(E,Saudi Arabia,Australian)...CHASSIS	
56	7-682-549-09	(E,Saudi Arabia,Australian) ...SCREW +B 3X10	
57	*4-932-825-01	BRACKET (MT)	
58	7-682-547-04	SCREW +BVTT 3X6 (S)	
59	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
60	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	
903	1-533-213-31	HOLDER, FUSE	
904	*A-4334-437-A	(AEP,UK)....MOUNTED PCB, POWER SUPPLY	
	*A-4334-443-A	(Italian)...MOUNTED PCB, POWER SUPPLY	
	*A-4334-455-A	(E,Saudi Arabia,Australian) ...MOUNTED PCB, POWER SUPPLY	
905	*A-4334-436-A	(AEP,UK).....MOUNTED PCB, POWER	
	*A-4334-442-A	(Italian)....MOUNTED PCB, POWER	
	*A-4334-454-A	(E,Saudi Arabia,Australian) ...MOUNTED PCB, POWER	
906	*1-634-748-11	PC BOARD, TRANSFORMER	
907	⚠1-574-804-11	(UK).....CORD, POWER	
	⚠1-574-805-11	(AEP,Italian,Saudi Arabia)...CORD, POWER	
	⚠1-574-902-11	(E).....CORD, POWER	
	⚠1-575-677-11	(Australian).....CORD, POWER	

No.	Part No.	Description	Remarks
908	⚠1-526-565-00	(E)...AC PLUG ADAPTOR	
910	⚠1-506-409-11	(Saudi Arabia)...ADAPTOR, CONVERSION	
911	*A-4334-434-A	(AEP,UK).....MOUNTED PCB, TUNER AUDIO	
	*A-4334-440-A	(Italian)....MOUNTED PCB, TUNER AUDIO	
	*A-4334-452-A	(E,Saudi Arabia,Australian) ...MOUNTED PCB, TUNER AUDIO	
912	*1-634-753-11	(E,Saudi Arabia,Australian) ...PC BOARD, ANT	
ANT1	1-501-420-11	(E,Saudi Arabia,Australian) ...ANTENNA TELESCPIC	
F901	⚠1-532-285-00	(E,Saudi Arabia,Australian) ..FUSE, TIME-LAG (T1.25A)	
F902	⚠1-532-285-00	FUSE, TIME-LAG (T1.25A)	
S901	⚠1-571-309-11	(E,Saudi Arabia,Australian) ...SWITCH 2-2-2 (VOLTAGE SELECTOR)	
T901	⚠1-450-071-11	(E,Saudi Arabia,Australian) ...TRANSFORMER, POWER	
T901	⚠1-450-072-11	(AEP,Italian)...TRANSFORMER, POWER	
T901	⚠1-450-073-11	(UK).....TRANSFORMER, POWER	
TB1	*1-537-138-31	(AEP,UK,Italian) ...TERMINAL BOARD (ANTENNA)	
TB1	*1-537-238-21	(E,Saudi Arabia,Australian) ...TERMINAL BOARD (ANTENNA)	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

SECTION 5
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA...,
UPC...: μPC, UPD...: μPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref.No.	Part No.	Description
901	*A-4334-433-A	(AEP,UK).....MOUNTED PCB, PANEL
	*A-4334-445-A	(Italian).....MOUNTED PCB, PANEL
	*A-4334-451-A	(E,Saudi Arabia,Australian) ...MOUNTED PCB, PANEL
902	*1-634-752-11	PC BOARD, VOL
903	1-533-213-31	HOLDER, FUSE
904	*A-4334-437-A	(AEP,UK)....MOUNTED PCB, POWER SUPPLY
	*A-4334-443-A	(Italian)...MOUNTED PCB, POWER SUPPLY
	*A-4334-455-A	(E,Saudi Arabia,Australian) ...MOUNTED PCB, POWER SUPPLY
905	*A-4334-436-A	(AEP,UK)....MOUNTED PCB, POWER
	*A-4334-442-A	(Italian)...MOUNTED PCB, POWER
	*A-4334-454-A	(E,Saudi Arabia,Australian) ...MOUNTED PCB, POWER
906	*1-634-748-11	PC BOARD, TRANSFORMER
907	⚠1-574-804-11	(UK).....CORD, POWER
	⚠1-574-805-11	(AEP,Italian,Saudi Arabia)..CORD, POWER
	⚠1-574-902-11	(E).....CORD, POWER
	⚠1-575-677-11	(Australian).....CORD, POWER
908	⚠1-526-565-00	(E)...AC PLUG ADAPTOR
909	1-575-733-11	WIRE, FLAT TYPE (17 CORE)
910	⚠1-506-409-11	(Saudi Arabia)...ADAPTOR, CONVERSION
911	*A-4334-434-A	(AEP,UK)....MOUNTED PCB, TUNER AUDIO
	*A-4334-440-A	(Italian)...MOUNTED PCB, TUNER AUDIO
	*A-4334-452-A	(E,Saudi Arabia,Australian) ...MOUNTED PCB, TUNER AUDIO
912	*1-634-753-11	(E,Saudi Arabia,Australian) ...PC BOARD, ANT
ANT1	1-501-420-11	(E,Saudi Arabia,Australian) ...ANTENNA TELESCOPIC
C2	1-124-477-11	ELECT 47MF 20% 25V
C3	1-161-379-00	CERAMIC 0.01MF 30% 16V
C5	1-101-005-00	CERAMIC 0.022MF 50V
C6	1-162-215-31	CERAMIC 47PF 5% 50V
C8	1-101-005-00	CERAMIC 0.022MF 50V
C9	1-102-120-00	(AEP,UK,Italian)... ...CERAMIC 0.0018MF 10% 50V
C10	1-161-374-11	(AEP,UK,Italian)... ...CERAMIC 0.0015MF 20% 16V
C11	1-101-005-00	CERAMIC 0.022MF 50V
C12	1-101-005-00	CERAMIC 0.022MF 50V
C51	1-164-056-11	CERAMIC 27PF 5% 50V
C52	1-164-056-11	CERAMIC 27PF 5% 50V
C53	1-161-379-00	CERAMIC 0.01MF 30% 16V
C54	1-161-379-00	CERAMIC 0.01MF 30% 16V
C55	1-161-379-00	CERAMIC 0.01MF 30% 16V
C56	1-161-379-00	CERAMIC 0.01MF 30% 16V
C57	1-161-379-00	CERAMIC 0.01MF 30% 16V
C58	1-126-157-11	ELECT 10MF 20% 16V
C59	1-161-379-00	CERAMIC 0.01MF 30% 16V
C60	1-124-477-11	ELECT 47MF 20% 25V
C61	1-124-925-11	ELECT 2.2MF 20% 50V
C62	1-136-153-00	FILM 0.01MF 5% 50V
C63	1-124-463-00	ELECT 0.1MF 20% 50V
C64	1-124-465-00	(AEP,UK,Italian) ...ELECT 0.47MF 20% 50V
C65	1-136-157-00	FILM 0.022MF 5% 50V
C66	1-136-157-00	FILM 0.022MF 5% 50V
C67	1-162-211-31	(AEP,UK,Italian) ...CERAMIC 33PF 5% 50V
C70	1-161-378-00	CERAMIC 0.01MF 30% 16V
C81	1-161-379-00	CERAMIC 0.01MF 30% 16V
C82	1-126-176-11	ELECT 220MF 20% 10V
C83	1-161-379-00	CERAMIC 0.01MF 30% 16V
C84	1-124-927-11	ELECT 4.7MF 20% 50V
C86	1-124-463-00	ELECT 0.1MF 20% 50V
C87	1-161-379-00	CERAMIC 0.01MF 30% 16V
C88	1-126-157-11	ELECT 10MF 20% 16V
C90	1-124-477-11	ELECT 47MF 20% 25V
C91	1-136-155-00	FILM 0.015MF 5% 50V
C92	1-136-155-00	FILM 0.015MF 5% 50V
C95	1-124-438-00	ELECT 1MF 20% 50V
C96	1-124-438-00	ELECT 1MF 20% 50V
C97	1-124-438-00	ELECT 1MF 20% 50V
C98	1-124-438-00	ELECT 1MF 20% 50V
C101	1-124-477-11	ELECT 47MF 20% 25V
C102	1-161-379-00	CERAMIC 0.01MF 30% 16V
C103	1-124-463-00	ELECT 0.1MF 20% 50V
C104	1-124-465-00	ELECT 0.47MF 20% 50V
C105	1-124-438-00	ELECT 1MF 20% 50V
C106	1-124-438-00	ELECT 1MF 20% 50V
C107	1-162-282-11	(Italian)...CERAMIC 100PF 10% 50V
C108	1-162-211-31	(EXCEPT Italian) ...CERAMIC 33PF 5% 50V
C108	1-162-282-11	(Italian)...CERAMIC 100PF 10% 50V
C109	1-136-153-00	FILM 0.01MF 5% 50V
C110	1-161-379-00	CERAMIC 0.01MF 30% 16V
C111	1-124-925-11	ELECT 2.2MF 20% 50V
C112	1-101-005-00	CERAMIC 0.022MF 50V
C113	1-161-379-00	CERAMIC 0.01MF 30% 16V
C121	1-101-005-00	(AEP,UK,Italian) ...CERAMIC 0.022MF 50V

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref.No.	Part No.	Description			
C132	1-162-201-31	(E,Saudi Arabia,Australian) ...CERAMIC	12PF	5%	50V
C133	1-136-162-00	(E,Saudi Arabia,Australian) ...FILM	0.056MF	5%	50V
C134	1-101-005-00	(E,Saudi Arabia,Australian) ...CERAMIC	0.022MF		50V
C152	1-161-379-00	CERAMIC	0.01MF	30%	16V
C501	1-125-486-11	DOUBLE LAYERS	0.22F		5.5V
C502	1-136-171-00	FILM	0.33MF	5%	50V
C503	1-162-200-31	CERAMIC	11PF	5%	50V
C504	1-162-200-31	CERAMIC	11PF	5%	50V
C505	1-162-199-31	CERAMIC	10PF	5%	50V
C506	1-162-199-31	CERAMIC	10PF	5%	50V
C507	1-126-157-11	ELECT	10MF	20%	16V
C508	1-136-159-00	FILM	0.033MF	5%	50V
C509	1-124-463-00	ELECT	0.1MF	20%	50V
C510	1-162-282-31	CERAMIC	100PF	10%	50V
C601	1-124-927-11	ELECT	4.7MF	20%	50V
C602	1-124-443-00	ELECT	100MF	20%	10V
C603	1-161-379-00	CERAMIC	0.01MF	30%	16V
C621	1-162-294-31	CERAMIC	0.001MF	10%	50V
C622	1-124-438-00	ELECT	1MF	20%	50V
C623	1-162-294-31	CERAMIC	0.001MF	10%	50V
C624	1-124-438-00	ELECT	1MF	20%	50V
C625	1-162-294-31	CERAMIC	0.001MF	10%	50V
C626	1-126-157-11	ELECT	10MF	20%	16V
C672	1-126-157-11	ELECT	10MF	20%	16V
C673	1-126-157-11	ELECT	10MF	20%	16V
C701	1-124-465-00	(AEP,UK,Italian) ...ELECT	0.47MF	20%	50V
C702	1-124-477-11	(AEP,UK,Italian) ...ELECT	47MF	20%	25V
C704	1-162-286-31	CERAMIC	220PF	10%	50V
C706	1-162-286-31	(AEP,UK,Italian) ...CERAMIC	220PF	10%	50V
C707	1-124-927-11	(AEP,UK,Italian) ...ELECT	4.7MF	20%	50V
C708	1-130-480-00	(AEP,UK,Italian) ...MYLAR	0.0056MF	5%	50V
C709	1-130-473-00	(AEP,UK,Italian) ...MYLAR	0.0015MF	5%	50V
C710	1-124-925-11	(AEP,UK,Italian) ...ELECT	2.2MF	20%	50V
C721	1-162-282-31	CERAMIC	100PF	10%	50V
C722	1-162-282-31	CERAMIC	100PF	10%	50V
C731	1-161-379-00	CERAMIC	0.01MF	30%	16V
C732	1-136-163-00	FILM	0.068MF	5%	50V
C733	1-124-465-00	ELECT	0.47MF	20%	50V
C734	1-136-156-00	FILM	0.018MF	5%	50V
C735	1-164-159-11	CERAMIC	0.1MF		50V
C736	1-130-480-00	MYLAR	0.0056MF	5%	50V
C737	1-136-162-00	FILM	0.056MF	5%	50V
C738	1-130-472-00	MYLAR	0.0012MF	5%	50V
C739	1-136-155-00	FILM	0.015MF	5%	50V
C740	1-162-290-31	CERAMIC	470PF	10%	50V
C741	1-161-377-00	CERAMIC	0.0047MF	30%	16V
C742	1-162-215-31	CERAMIC	47PF	5%	50V
C743	1-162-282-31	CERAMIC	100PF	10%	50V

Ref.No.	Part No.	Description			
C744	1-136-165-00	FILM	0.1MF	5%	50V
C745	1-136-165-00	FILM	0.1MF	5%	50V
C746	1-126-157-11	ELECT	10MF	20%	16V
C747	1-126-157-11	ELECT	10MF	20%	16V
C751	1-123-875-11	ELECT	10MF	20%	50V
C752	1-162-290-31	CERAMIC	470PF	10%	50V
C753	1-126-233-11	ELECT	22MF	20%	50V
C754	1-124-910-11	ELECT	47MF	20%	35V
C755	1-136-165-00	FILM	0.1MF	5%	50V
C756	1-136-165-00	FILM	0.1MF	5%	50V
C757	1-162-282-11	(Italian)...CERAMIC	100PF	10%	50V
C761	1-124-438-00	ELECT	1MF	20%	50V
C791	1-162-294-31	CERAMIC	0.001MF	10%	50V
C792	1-162-294-31	CERAMIC	0.001MF	10%	50V
C795	1-124-477-11	ELECT	47MF	20%	25V
C796	1-124-477-11	ELECT	47MF	20%	25V
C797	1-123-875-11	ELECT	10MF	20%	50V
C798	1-124-463-00	ELECT	0.1MF	20%	50V
C801	1-124-465-00	(AEP,UK,Italian) ...ELECT	0.47MF	20%	50V
C802	1-124-477-11	(AEP,UK,Italian) ...ELECT	47MF	20%	25V
C804	1-162-286-31	CERAMIC	220PF	10%	50V
C806	1-162-286-31	(AEP,UK,Italian) ...CERAMIC	220PF	10%	50V
C807	1-124-927-11	(AEP,UK,Italian) ...ELECT	4.7MF	20%	50V
C808	1-130-480-00	(AEP,UK,Italian) ...MYLAR	0.0056MF	5%	50V
C809	1-130-473-00	(AEP,UK,Italian) ...MYLAR	0.0015MF	5%	50V
C810	1-124-925-11	(AEP,UK,Italian) ...ELECT	2.2MF	20%	50V
C821	1-162-282-31	CERAMIC	100PF	10%	50V
C822	1-162-282-31	CERAMIC	100PF	10%	50V
C831	1-161-379-00	CERAMIC	0.01MF	30%	16V
C832	1-136-163-00	FILM	0.068MF	5%	50V
C833	1-124-465-00	ELECT	0.47MF	20%	50V
C834	1-136-156-00	FILM	0.018MF	5%	50V
C835	1-164-159-11	CERAMIC	0.1MF		50V
C836	1-130-480-00	MYLAR	0.0056MF	5%	50V
C837	1-136-162-00	FILM	0.056MF	5%	50V
C838	1-130-472-00	MYLAR	0.0012MF	5%	50V
C839	1-136-155-00	FILM	0.015MF	5%	50V
C840	1-162-290-31	CERAMIC	470PF	10%	50V
C841	1-161-377-00	CERAMIC	0.0047MF	30%	16V
C842	1-162-215-31	CERAMIC	47PF	5%	50V
C843	1-162-282-31	CERAMIC	100PF	10%	50V
C844	1-136-165-00	FILM	0.1MF	5%	50V
C845	1-136-165-00	FILM	0.1MF	5%	50V
C846	1-126-157-11	ELECT	10MF	20%	16V
C847	1-126-157-11	ELECT	10MF	20%	16V
C851	1-123-875-11	ELECT	10MF	20%	50V
C852	1-162-290-31	CERAMIC	470PF	10%	50V
C853	1-126-233-11	ELECT	22MF	20%	50V
C854	1-124-910-11	ELECT	47MF	20%	35V
C855	1-136-165-00	FILM	0.1MF	5%	50V

Ref.No.	Part No.	Description
C856	1-136-165-00	FILM 0.1MF 5% 50V
C857	1-162-282-11	(Italian)...CERAMIC 100PF 10% 50V
C861	1-124-438-00	ELECT 1MF 20% 50V
C891	1-123-875-11	ELECT 10MF 20% 50V
C892	1-123-875-11	ELECT 10MF 20% 50V
C893	1-124-484-11	(AEP,UK,Italian) ...ELECT 220MF 20% 35V
C893	1-124-911-11	(E,Saudi Arabia,Australian) ...ELECT 220MF 20% 50V
C894	1-124-911-11	(E,Saudi Arabia,Australian) ...ELECT 220MF 20% 50V
C894	1-124-484-11	(AEP,UK,Italian) ...ELECT 220MF 20% 35V
C895	1-123-875-11	ELECT 10MF 20% 50V
C901	1-136-171-00	FILM 0.33MF 5% 50V
C902	1-136-171-00	FILM 0.33MF 5% 50V
C903	1-136-165-00	FILM 0.1MF 5% 50V
C904	1-136-165-00	FILM 0.1MF 5% 50V
C905	1-124-026-00	(AEP,UK,Italian) ...ELECT 3300MF 20% 35V
C905	1-126-224-11	(E,Saudi Arabia,Australian) ...ELECT 4700MF 20% 42V
C906	1-126-224-11	(E,Saudi Arabia,Australian) ...ELECT 4700MF 20% 42V
C906	1-124-026-00	(AEP,UK,Italian) ...ELECT 3300MF 20% 35V
C907	1-124-484-11	(AEP,UK,Italian) ...ELECT 220MF 20% 35V
C907	1-124-911-11	(E,Saudi Arabia,Australian) ...ELECT 220MF 20% 50V
C908	1-124-911-11	ELECT 220MF 20% 50V
C909	1-124-484-11	(AEP,UK,Italian) ...ELECT 220MF 20% 35V
C909	1-124-911-11	(E,Saudi Arabia,Australian) ...ELECT 220MF 20% 50V
C910	1-161-379-00	CERAMIC 0.01MF 30% 16V
C911	1-124-618-11	ELECT 2200MF 20% 35V
C912	1-124-618-11	ELECT 2200MF 20% 35V
C913	1-124-927-11	ELECT 4.7MF 20% 50V
C914	1-124-927-11	ELECT 4.7MF 20% 50V
C915	1-123-875-11	ELECT 10MF 20% 50V
C916	1-124-477-11	ELECT 47MF 20% 25V
C917	1-124-477-11	ELECT 47MF 20% 25V
C918	1-124-120-11	ELECT 220MF 20% 16V
C931	1-123-875-11	ELECT 10MF 20% 50V
C932	1-124-443-00	ELECT 100MF 20% 10V
C951	1-136-165-00	(Italian)...FILM 0.1MF 5% 50V
C952	1-136-165-00	(Italian)...FILM 0.1MF 5% 50V
C953	1-164-096-11	(Italian)...CERAMIC 0.01MF 50V
C954	1-164-096-11	(Italian)...CERAMIC 0.01MF 50V
CB701⚠	1-532-564-00	BREAKER, CIRCUIT (2.2A)
CB801⚠	1-532-564-00	BREAKER, CIRCUIT (2.2A)
CF1	1-567-389-11	FILTER, CERAMIC
CF2	1-567-389-11	FILTER, CERAMIC
CF3	1-567-389-11	(Italian)...FILTER, CERAMIC
CNJ601*	1-566-972-11	PIN, CONNECTOR (PC BOARD) 7P
CNJ902	1-560-941-00	PIN, CONNECTOR 4P
CNJ903	1-560-942-00	PIN, CONNECTOR 6P
CNJ904*	1-565-956-11	SOCKET, CONNECTOR 7P

Ref.No.	Part No.	Description
CNP101*	1-568-836-11	SOCKET, CONNECTOR 17P
CNP301*	1-564-321-00	PIN, CONNECTOR 2P
CNP302*	1-564-524-11	PLUG, CONNECTOR 9P
CNP502	1-562-087-00	SOCKET, CONNECTOR 4P
CNP503	1-561-115-00	SOCKET, CONNECTOR 6P
CNP601*	1-566-969-11	HOUSING, CONNECTOR(PC BOARD)7P
CNP602A	1-568-860-11	SOCKET, CONNECTOR 17P
CNP602B*	1-564-519-11	PLUG, CONNECTOR 4P
CNP701*	1-565-291-11	SOCKET, CONNECTOR 13P(SYSTEM CONTROL 2)
CNP702	1-506-979-31	CONNECTOR, BOARD TO BOARD 13P
CNP703*	1-564-508-11	PLUG, CONNECTOR 5P
CNP704*	1-564-506-11	PLUG, CONNECTOR 3P
CNP752*	1-565-973-11	PLUG (WITH CONNECTOR) (L) 7P
CT1	1-141-227-00	(E,Saudi Arabia,Australian) ...CAP,TRIMMER (20PF)
CT2	1-141-227-00	(E,Saudi Arabia,Australian) ...CAP,TRIMMER (20PF)
D1	8-719-975-10	(E,Saudi Arabia,Australian) ...DIODE KV-1560NT
D11	8-719-912-20	(AEP,UK,Italian)...DIODE 1SS120
D501	8-719-303-13	DIODE SEL1210W
D502	8-719-303-13	DIODE SEL1210W
D503	8-719-303-13	DIODE SEL1210W
D504	8-719-303-13	DIODE SEL1210W
D505	8-719-912-20	DIODE 1SS120
D506	8-719-912-20	DIODE 1SS120
D507	8-719-912-20	DIODE 1SS120
D508	8-719-912-20	DIODE 1SS120
D509	8-719-912-20	DIODE 1SS120
D510	8-719-912-20	DIODE 1SS120
D511	8-719-912-20	DIODE 1SS120
D512	8-719-912-20	DIODE 1SS120
D513	8-719-912-20	DIODE 1SS120
D514	8-719-912-20	DIODE 1SS120
D516	8-719-912-20	DIODE 1SS120
D517	8-719-912-20	(Italian)...DIODE 1SS120
D518	8-719-912-20	(E,Saudi Arabia,Australian) ...DIODE 1SS120
D520	8-719-912-20	DIODE 1SS120
D521	8-719-912-20	DIODE 1SS120
D522	8-719-912-20	DIODE 1SS120
D523	8-719-912-20	DIODE 1SS120
D524	8-719-912-20	DIODE 1SS120
D525	8-719-912-20	DIODE 1SS120
D791	8-719-912-20	DIODE 1SS120
D901	8-719-312-09	DIODE RBA-402
D902	8-719-200-82	DIODE 11ES2
D903	8-719-200-82	DIODE 11ES2
D904	8-719-200-82	DIODE 11ES2
D905	8-719-200-82	DIODE 11ES2
D906	8-719-200-82	DIODE 11ES2
D907	8-719-200-82	DIODE 11ES2
D908	8-719-934-22	DIODE HZS30-2L
D909	8-719-014-88	DIODE UZP-6.8BC
D910	8-719-912-20	DIODE 1SS120
D911	8-719-912-20	DIODE 1SS120
D912	8-719-912-20	DIODE 1SS120

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref.No.	Part No.	Description
F901 ⚠	1-532-285-00	(E,Saudi Arabia,Australian) ...FUSE, TIME-LAG (T1.25A)
F902 ⚠	1-532-285-00	FUSE, TIME-LAG (T1.25A)
FE1	1-463-962-11	(EXCEPT Italian)..FRONT END(FM 2 GANG)
FE1	1-463-957-11	(Italian).....FRONT END(FM 4 GANG)
FE2	1-236-464-11	(E,Saudi Arabia,Australian) ...ENCAPSULATED COMPONENT
FE2	1-236-462-11	(AEP,UK,Italian) ...ENCAPSULATED COMPONENT
FE3	1-236-463-11	(AEP,UK,Italian) ...ENCAPSULATED COMPONENT
FL1	1-123-465-11	(Italian)...ENCAPSULATED COMPONENT
FL501	1-519-573-11	INDICATOR TUBE, FLUORESCENT
IC51	8-759-239-29	IC TC9217P
IC81	8-759-821-45	IC LA1851N
IC501	8-759-239-27	IC TMP-47C870N-4655
IC502	8-749-920-83	IC GP1U52XB
IC503	8-759-239-78	IC TC89101P
IC671	8-759-820-62	IC LB1639
IC691	8-759-634-50	IC M5218AL
IC731	8-759-602-04	IC M5226P
IC791	8-759-634-50	(AEP,UK,Italian)...IC M5218AL
IC792	8-759-208-08	IC TC4052BPHB
IC793	8-759-634-50	IC M5218AL
IC831	8-759-602-04	IC M5226P
IC891	8-749-900-96	(E,Saudi Arabia,Australian) ...IC STK4142MK2
IC891	8-749-920-13	(AEP,UK,Italian)...IC STK4132MK2
IC901	8-759-600-31	IC M5230L
IC902	8-759-604-84	IC M5F7806
ICP901 ⚠	1-532-846-21	LINK, IC (5A)
ICP902 ⚠	1-532-846-21	LINK, IC (5A)
IFT81	1-404-713-11	TRANSFORMER, IF
IFT82	1-404-807-11	TRANSFORMER, DISCRIMINATOR
J601	1-569-612-11	(EXCEPT Italian)...JACK, MINIATURE (MIX MIC)
J791	1-565-352-11	JACK, PIN 2P (PHONO/AUX)
J793	1-562-837-21	JACK (HEADPHONES)
J801	1-537-238-11	TERMINAL BOARD (SPEAKER)
L1	1-410-336-11	(AEP,UK,Italian)...INDUCTOR 220UH
L2	1-402-424-11	(E,Saudi Arabia,Australian) ...COIL (ANT,SW3)
L3	1-406-346-11	(E,Saudi Arabia,Australian) ...COIL (OSC,SW3)
L81	1-407-500-00	(AEP,UK,Italian)...INDUCTOR 4.7MMH
L81	1-410-521-11	(E,Saudi Arabia,Australian) ...INDUCTOR 100UH
L951	1-410-397-11	(Italian)...FERRITE BEAD INDUCTOR 1.1UH
L952	1-410-397-11	(Italian)...FERRITE BEAD INDUCTOR 1.1UH
LPF81	1-235-164-00	FILTER, LOW PASS
LPF82	1-235-164-00	FILTER, LOW PASS
Q1	8-729-620-19	TRANSISTOR 2SC2724-CD
Q3	8-729-900-80	TRANSISTOR DTC114ES
Q4	8-729-900-61	TRANSISTOR DTA114ES
Q5	8-729-900-80	TRANSISTOR DTC114ES
Q6	8-729-900-80	TRANSISTOR DTC114ES
Q7	8-729-900-61	TRANSISTOR DTA114ES
Q8	8-729-620-05	(AEP,UK,Italian)..TRANSISTOR 2SC2603-EF
Q9	8-729-900-80	TRANSISTOR DTC114ES
Q21	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q23	8-729-904-34	(E,Saudi Arabia,Australian) ...TRANSISTOR DTA114TS
Q24	8-729-900-80	(AEP,UK,Italian)..TRANSISTOR DTC114ES
Q25	8-729-900-80	(AEP,UK,Italian)..TRANSISTOR DTC114ES
Q26	8-729-900-80	(E,Saudi Arabia,Australian) ...TRANSISTOR DTC114ES
Q51	8-729-202-67	TRANSISTOR 2SK246-GR3
Q52	8-729-201-83	TRANSISTOR 2SC3112-A
Q53	8-729-202-67	(AEP,UK,Italian)..TRANSISTOR 2SK246-GR3
Q54	8-729-201-83	(AEP,UK,Italian)..TRANSISTOR 2SC3112-A
Q101	8-729-620-05	TRANSISTOR 2SC2603-EF
Q102	8-729-620-05	TRANSISTOR 2SC2603-EF
Q103	8-729-900-80	TRANSISTOR DTC114ES
Q104	8-729-900-80	TRANSISTOR DTC114ES
Q105	8-729-900-61	TRANSISTOR DTA114ES
Q151	8-729-620-19	(Italian)...TRANSISTOR 2SC2724-CD
Q152	8-729-620-19	(Italian)...TRANSISTOR 2SC2724-CD
Q501	8-729-620-05	TRANSISTOR 2SC2603-EF
Q502	8-729-900-80	TRANSISTOR DTC114ES
Q503	8-729-900-61	TRANSISTOR DTA114ES
Q504	8-729-900-80	TRANSISTOR DTC114ES
Q601	8-729-107-84	TRANSISTOR 2SC3623A-L
Q602	8-729-107-84	TRANSISTOR 2SC3623A-L
Q603	8-729-801-93	TRANSISTOR 2SD1387
Q621	8-729-620-05	TRANSISTOR 2SC2603-EF
Q732	8-729-620-05	TRANSISTOR 2SC2603-EF
Q832	8-729-620-05	TRANSISTOR 2SC2603-EF
Q901	8-729-900-80	TRANSISTOR DTC114ES
Q902	8-729-801-93	TRANSISTOR 2SD1387
Q911	8-729-900-80	TRANSISTOR DTC114ES
Q912	8-729-920-98	TRANSISTOR 2SD1761-EF
Q913	8-729-920-97	TRANSISTOR 2SB1187-EF
R3	1-247-891-00	CARBON 330K 5% 1/4W
R4	1-249-411-11	CARBON 330 5% 1/4W
R5	1-249-409-11	CARBON 220 5% 1/4W
R7	1-249-405-11	CARBON 100 5% 1/4W
R8	1-249-441-11	CARBON 100K 5% 1/4W
R9	1-249-437-11	CARBON 47K 5% 1/4W
R11	1-249-433-11	(AEP,UK,Italian) ...CARBON 22K 5% 1/4W
R13	1-249-441-11	CARBON 100K 5% 1/4W
R14	1-249-437-11	CARBON 47K 5% 1/4W
R15	1-247-903-00	(AEP,UK,Italian) ...CARBON 1M 5% 1/4W
R50	1-249-417-11	CARBON 1K 5% 1/4W
R51	1-249-417-11	CARBON 1K 5% 1/4W
R52	1-249-417-11	CARBON 1K 5% 1/4W
R53	1-249-417-11	CARBON 1K 5% 1/4W
R54	1-249-417-11	CARBON 1K 5% 1/4W
R55	1-249-425-11	CARBON 4.7K 5% 1/4W
R56	1-249-405-11	CARBON 100 5% 1/4W
R57	1-249-405-11	CARBON 100 5% 1/4W

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description			
R58	1-249-423-11	CARBON	3.3K	5%	1/4W
R59	1-249-414-11	CARBON	560	5%	1/4W
R60	1-249-417-11	CARBON	1K	5%	1/4W
R61	1-249-410-11	CARBON	270	5%	1/4W
R62	1-249-425-11	CARBON	4.7K	5%	1/4W
R63	1-249-421-11	CARBON	2.2K	5%	1/4W
R64	1-249-425-11	CARBON	4.7K	5%	1/4W
R65	1-249-425-11	CARBON	4.7K	5%	1/4W
R66	1-249-405-11	CARBON	100	5%	1/4W
R67	1-249-423-11	(AEP,UK,Italian) ...CARBON	3.3K	5%	1/4W
R68	1-249-414-11	(AEP,UK,Italian) ...CARBON	560	5%	1/4W
R69	1-249-417-11	(AEP,UK,Italian) ...CARBON	1K	5%	1/4W
R70	1-249-410-11	(AEP,UK,Italian) ...CARBON	270	5%	1/4W
R71	1-249-433-11	(AEP,UK,Italian) ...CARBON	22K	5%	1/4W
R72	1-249-421-11	(AEP,UK,Italian) ...CARBON	2.2K	5%	1/4W
R73	1-249-425-11	(AEP,UK,Italian) ...CARBON	4.7K	5%	1/4W
R74	1-249-425-11	(AEP,UK,Italian) ...CARBON	4.7K	5%	1/4W
R81	1-249-433-11	CARBON	22K	5%	1/4W
R82	1-249-417-11	CARBON	1K	5%	1/4W
R84	1-249-429-11	CARBON	10K	5%	1/4W
R85	1-249-441-11	CARBON	100K	5%	1/4W
R86	1-249-437-11	CARBON	47K	5%	1/4W
R87	1-249-405-11	CARBON	100	5%	1/4W
R88	1-249-426-11	CARBON	5.6K	5%	1/4W
R89	1-249-426-11	CARBON	5.6K	5%	1/4W
R90	1-249-421-11	CARBON	2.2K	5%	1/4W
R91	1-249-421-11	CARBON	2.2K	5%	1/4W
R92	1-249-435-11	CARBON	33K	5%	1/4W
R93	1-249-435-11	CARBON	33K	5%	1/4W
R94	1-249-417-11	CARBON	1K	5%	1/4W
R95	1-249-417-11	CARBON	1K	5%	1/4W
R96	1-249-429-11	CARBON	10K	5%	1/4W
R97	1-249-429-11	CARBON	10K	5%	1/4W
R98	1-249-405-11	CARBON	100	5%	1/4W
R99	1-249-417-11	CARBON	1K	5%	1/4W
R100	1-249-429-11	CARBON	10K	5%	1/4W
R102	1-249-432-11	CARBON	18K	5%	1/4W
R103	1-249-428-11	CARBON	8.2K	5%	1/4W
R104	1-249-435-11	CARBON	33K	5%	1/4W
R107	1-249-423-11	CARBON	3.3K	5%	1/4W
R116	1-249-425-11	CARBON	4.7K	5%	1/4W
R121	1-249-434-11	(AEP,UK,Italian) ...CARBON	27K	5%	1/4W
R122	1-249-433-11	(AEP,UK,Italian) ...CARBON	22K	5%	1/4W
R123	1-249-421-11	CARBON	2.2K	5%	1/4W
R151	1-249-411-11	(Italian)...CARBON	330	5%	1/4W
R152	1-249-432-11	(Italian)...CARBON	18K	5%	1/4W
R153	1-249-414-11	(Italian)...CARBON	560	5%	1/4W
R154	1-249-411-11	(Italian)...CARBON	330	5%	1/4W
R155	1-249-434-11	(Italian)...CARBON	27K	5%	1/4W

Ref.No.	Part No.	Description			
R156	1-249-405-11	CARBON	100	5%	1/4W
R161	1-249-430-11	CARBON	12K	5%	1/4W
R162	1-249-430-11	CARBON	12K	5%	1/4W
R501	1-249-429-11	CARBON	10K	5%	1/4W
R502	1-249-429-11	CARBON	10K	5%	1/4W
R503	1-249-429-11	CARBON	10K	5%	1/4W
R504	1-249-429-11	CARBON	10K	5%	1/4W
R505	1-249-429-11	CARBON	10K	5%	1/4W
R506	1-249-429-11	CARBON	10K	5%	1/4W
R507	1-249-417-11	CARBON	1K	5%	1/4W
R508	1-249-417-11	CARBON	1K	5%	1/4W
R509	1-249-417-11	CARBON	1K	5%	1/4W
R510	1-249-417-11	CARBON	1K	5%	1/4W
R511	1-249-429-11	CARBON	10K	5%	1/4W
R512	1-249-429-11	CARBON	10K	5%	1/4W
R513	1-249-429-11	CARBON	10K	5%	1/4W
R514	1-249-423-11	CARBON	3.3K	5%	1/4W
R515	1-249-417-11	CARBON	1K	5%	1/4W
R516	1-249-441-11	CARBON	100K	5%	1/4W
R517	1-249-437-11	CARBON	47K	5%	1/4W
R518	1-249-415-11	CARBON	680	5%	1/4W
R519	1-249-415-11	CARBON	680	5%	1/4W
R520	1-249-415-11	CARBON	680	5%	1/4W
R521	1-249-415-11	CARBON	680	5%	1/4W
R522	1-249-417-11	CARBON	1K	5%	1/4W
R523	1-249-417-11	CARBON	1K	5%	1/4W
R524	1-249-417-11	CARBON	1K	5%	1/4W
R525	1-249-417-11	CARBON	1K	5%	1/4W
R526	1-249-417-11	CARBON	1K	5%	1/4W
R527	1-249-429-11	CARBON	10K	5%	1/4W
R528	1-249-429-11	CARBON	10K	5%	1/4W
R529	1-249-433-11	CARBON	22K	5%	1/4W
R530	1-249-429-11	CARBON	10K	5%	1/4W
R602	1-249-429-11	CARBON	10K	5%	1/4W
R603	1-249-429-11	CARBON	10K	5%	1/4W
R606	1-249-419-11	CARBON	1.5K	5%	1/4W
R607	1-249-422-11	CARBON	2.7K	5%	1/4W
R608	1-249-429-11	CARBON	10K	5%	1/4W
R609	1-249-429-11	CARBON	10K	5%	1/4W
R621	1-249-429-11	CARBON	10K	5%	1/4W
R622	1-249-409-11	CARBON	220	5%	1/4W
R623	1-249-434-11	CARBON	27K	5%	1/4W
R624	1-247-881-00	CARBON	120K	5%	1/4W
R625	1-249-422-11	CARBON	2.7K	5%	1/4W
R627	1-249-437-11	CARBON	47K	5%	1/4W
R628	1-249-405-11	CARBON	100	5%	1/4W
R671	1-249-415-11	CARBON	680	5%	1/4W
R691	1-249-405-11	CARBON	100	5%	1/4W
R692	1-249-405-11	CARBON	100	5%	1/4W
R701	1-249-429-11	CARBON	10K	5%	1/4W
R702	1-249-423-11	CARBON	3.3K	5%	1/4W
R703	1-249-429-11	CARBON	10K	5%	1/4W
R704	1-249-417-11	CARBON	1K	5%	1/4W
R705	1-249-437-11	(AEP,UK)...CARBON	47K	5%	1/4W
R706	1-249-417-11	CARBON	1K	5%	1/4W
R707	1-247-897-11	(AEP,UK,Italian) ...CARBON	560K	5%	1/4W
R708	1-249-437-11	(AEP,UK)...CARBON	47K	5%	1/4W

Ref.No.	Part No.	Description			
R709	1-249-430-11	(AEP,UK,Italian)			
		...CARBON	12K	5%	1/4W
R709	1-249-436-11	(E,Saudi Arabia,Australian)			
		...CARBON	39K	5%	1/4W
R710	1-249-433-11	CARBON	22K	5%	1/4W
R711	1-249-427-11	CARBON	6.8K	5%	1/4W
R712	1-249-429-11	CARBON	10K	5%	1/4W
R713	1-249-405-11	(AEP,UK,Italian)			
		...CARBON	100	5%	1/4W
R721	1-249-428-11	CARBON	8.2K	5%	1/4W
R722	1-249-423-11	CARBON	3.3K	5%	1/4W
R724	1-249-435-11	CARBON	33K	5%	1/4W
R725	1-249-405-11	CARBON	100	5%	1/4W
R726	1-249-413-11	CARBON	470	5%	1/4W
R727	1-249-416-11	CARBON	820	5%	1/4W
R731	1-249-425-11	CARBON	4.7K	5%	1/4W
R732	1-249-437-11	CARBON	47K	5%	1/4W
R733	1-249-429-11	CARBON	10K	5%	1/4W
R734	1-249-432-11	CARBON	18K	5%	1/4W
R735	1-249-419-11	CARBON	1.5K	5%	1/4W
R736	1-247-891-00	CARBON	330K	5%	1/4W
R737	1-249-425-11	CARBON	4.7K	5%	1/4W
R751	1-249-417-11	CARBON	1K	5%	1/4W
R752	1-249-438-11	CARBON	56K	5%	1/4W
R753	1-249-412-11	CARBON	390	5%	1/4W
R754	1-249-438-11	CARBON	56K	5%	1/4W
R755	1-249-421-11	CARBON	2.2K	5%	1/4W
R756	1-249-421-11	CARBON	2.2K	5%	1/4W
R757	1-249-482-11	CARBON	4.7	5%	1/2W
R771	1-247-749-11	CARBON	560	5%	1/2W
R775	1-249-429-11	CARBON	10K	5%	1/4W
R791	1-249-441-11	CARBON	100K	5%	1/4W
R792	1-249-441-11	CARBON	100K	5%	1/4W
R795	1-249-417-11	CARBON	1K	5%	1/4W
R796	1-249-441-11	CARBON	100K	5%	1/4W
R797	1-247-903-00	CARBON	1M	5%	1/4W
R801	1-249-429-11	CARBON	10K	5%	1/4W
R802	1-249-423-11	CARBON	3.3K	5%	1/4W
R803	1-249-429-11	CARBON	10K	5%	1/4W
R804	1-249-417-11	CARBON	1K	5%	1/4W
R805	1-249-437-11	CARBON	47K	5%	1/4W
R806	1-249-417-11	(AEP,UK)...CARBON	1K	5%	1/4W
R807	1-247-897-11	(AEP,UK,Italian)			
		...CARBON	560K	5%	1/4W
R808	1-249-437-11	(AEP,UK)...CARBON	47K	5%	1/4W
R809	1-249-430-11	(AEP,UK,Italian)			
		...CARBON	12K	5%	1/4W
R809	1-249-436-11	(E,Saudi Arabia,Australian)			
		...CARBON	39K	5%	1/4W
R810	1-249-433-11	CARBON	22K	5%	1/4W
R811	1-249-427-11	CARBON	6.8K	5%	1/4W
R812	1-249-429-11	CARBON	10K	5%	1/4W
R813	1-249-405-11	(AEP,UK,Italian)			
		...CARBON	100	5%	1/4W
R821	1-249-428-11	CARBON	8.2K	5%	1/4W
R822	1-249-423-11	CARBON	3.3K	5%	1/4W
R824	1-249-435-11	CARBON	33K	5%	1/4W
R825	1-249-405-11	CARBON	100	5%	1/4W

Ref.No.	Part No.	Description			
R826	1-249-413-11	CARBON	470	5%	1/4W
R827	1-249-416-11	CARBON	820	5%	1/4W
R831	1-249-425-11	CARBON	4.7K	5%	1/4W
R832	1-249-437-11	CARBON	47K	5%	1/4W
R833	1-249-429-11	CARBON	10K	5%	1/4W
R834	1-249-432-11	CARBON	18K	5%	1/4W
R835	1-249-419-11	CARBON	1.5K	5%	1/4W
R836	1-247-891-00	CARBON	330K	5%	1/4W
R837	1-249-425-11	CARBON	4.7K	5%	1/4W
R851	1-249-417-11	CARBON	1K	5%	1/4W
R852	1-249-438-11	CARBON	56K	5%	1/4W
R853	1-249-412-11	CARBON	390	5%	1/4W
R854	1-249-438-11	CARBON	56K	5%	1/4W
R855	1-249-421-11	CARBON	2.2K	5%	1/4W
R856	1-249-421-11	CARBON	2.2K	5%	1/4W
R857	1-249-482-11	CARBON	4.7	5%	1/2W
R871	1-247-749-11	CARBON	560	5%	1/2W
R875	1-249-429-11	CARBON	10K	5%	1/4W
R891 ⚠	1-212-881-11	FUSIBLE	100	5%	1/4W F
R892 ⚠	1-212-881-11	FUSIBLE	100	5%	1/4W F
R893	1-247-752-11	CARBON	1K	5%	1/2W
R894	1-247-752-11	CARBON	1K	5%	1/2W
R895 ⚠	1-212-881-11	FUSIBLE	100	5%	1/4W F
R896	1-247-883-00	CARBON	150K	5%	1/4W
R897	1-249-437-11	CARBON	47K	5%	1/4W
R898	1-249-429-11	CARBON	10K	5%	1/4W
R901 ⚠	1-212-885-00	(AEP,UK,Italian)			
		...FUSIBLE	150	5%	1/4W F
R901 ⚠	1-247-745-11	(E,Saudi Arabia,Australian)			
		...CARBON	330	5%	1/2W F
R902	1-249-429-11	CARBON	10K	5%	1/4W
R903 ⚠	1-247-752-11	CARBON	1K	5%	1/2W F
R904	1-249-439-11	CARBON	68K	5%	1/4W
R911	1-247-903-00	CARBON	1M	5%	1/4W
R912 ⚠	1-217-473-00	FUSIBLE	2.2	5%	1W F
R913 ⚠	1-217-473-00	FUSIBLE	2.2	5%	1W F
R914	1-249-432-11	CARBON	18K	5%	1/4W
R915	1-249-423-11	CARBON	3.3K	5%	1/4W
R916	1-249-431-11	CARBON	15K	5%	1/4W
R917	1-249-431-11	CARBON	15K	5%	1/4W
R918	1-249-429-11	CARBON	10K	5%	1/4W
R919	1-249-413-11	CARBON	470	5%	1/4W
R921	1-249-429-11	CARBON	10K	5%	1/4W
R922	1-249-429-11	CARBON	10K	5%	1/4W
R931 ⚠	1-212-877-11	FUSIBLE	68	5%	1/4W F
R951 ⚠	1-247-727-11	(Italian)...CARBON	10	5%	1/2W F
R952 ⚠	1-247-727-11	(Italian)...CARBON	10	5%	1/2W F
RV81	1-238-017-11	RES, ADJ, CARBON 22K			
RV82	1-238-017-11	RES, ADJ, CARBON 22K			
RV671	1-238-865-11	RES, VAR, CARBON (MOTOR)100KX2 (VOLUME)			
RV691	1-238-459-11	RES, VAR, CARBON 100K (BALANCE)			
RV701	1-238-491-11	RES, VAR, CARBON 500K/500K (DDFB)			
RV731	1-238-866-11	RES, VAR, SLIDE 250KX2 (12kHz)			
RV732	1-238-866-11	RES, VAR, SLIDE 250KX2 (4kHz)			
RV733	1-238-866-11	RES, VAR, SLIDE 250KX2 (1kHz)			
RV734	1-238-866-11	RES, VAR, SLIDE 250KX2 (400Hz)			
RV735	1-238-866-11	RES, VAR, SLIDE 250KX2 (100Hz)			

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref.No.	Part No.	Description
RY901	1-515-503-00	RELAY
S501	1-554-303-21	SWITCH, KEY BOARD (ENTER/NEXT)
S502	1-554-303-21	SWITCH, KEY BOARD (MEMORY)
S504	1-554-303-21	SWITCH, KEY BOARD (PHONO/VIDEO/AUX)
S505	1-554-303-21	SWITCH, KEY BOARD (CD)
S506	1-554-303-21	SWITCH, KEY BOARD (SHIFT)
S507	1-554-303-21	SWITCH, KEY BOARD (SLEEP)
S508	1-554-303-21	SWITCH, KEY BOARD (TUNER)
S509	1-554-303-21	SWITCH, KEY BOARD (TAPE)
S510	1-554-303-21	SWITCH, KEY BOARD (TIMER CONTROL)
S511	1-554-303-21	SWITCH, KEY BOARD (TIMER SET)
S512	1-554-303-21	SWITCH, KEY BOARD (TUNING +)
S513	1-554-303-21	SWITCH, KEY BOARD (TUNING -)
S514	1-554-303-21	SWITCH, KEY BOARD (SYSTEM POWER ON/STANDBY)
S515	1-554-303-21	SWITCH, KEY BOARD (CLOCK)
S516	1-554-303-21	SWITCH, KEY BOARD (BAND)
S517	1-554-303-21	SWITCH, KEY BOARD (MODE)
S518	1-554-303-21	SWITCH, KEY BOARD (TUNER/TIMER RESET +)
S519	1-554-303-21	SWITCH, KEY BOARD (TUNER/TIMER RESET -)
S901 ⚠	1-571-309-11	(E,Saudi Arabia,Australian) ...SWITCH 2-2-2 (VOLTAGE SELECTOR)
T901 ⚠	1-450-071-11	(E,Saudi Arabia,Australian) ...TRANSFORMER, POWER
T901 ⚠	1-450-072-11	(AEP,Italian)...TRANSFORMER, POWER
T901 ⚠	1-450-073-11	(UK).....TRANSFORMER, POWER
TB1	*1-537-138-31	(AEP,UK,Italian) ...TERMINAL BOARD (ANTENNA)
TB1	*1-537-238-21	(E,Saudi Arabia,Australian) ...TERMINAL BOARD (ANTENNA)
TP81	*1-560-060-00	PIN, CONNECTOR 2P
X51	1-577-126-11	VIBRATOR, CRYSTAL (7.2MHz)
X81	1-577-075-11	OSCILLATOR, CERAMIC (456kHz)
X501	1-567-821-21	VIBRATOR, CRYSTAL (4.19MHz)
X502	1-527-997-00	VIBRATOR, CRYSTAL (32kHz)

ACCESSORY & PACKING MATERIAL

*4-937-711-01	(AEP,Italian)...CUSHION (L)
*4-937-712-01	(AEP,Italian)...CUSHION (R)
*4-937-714-01	(AEP,Italian)...INDIVIDUAL CARTON

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

9-955-685-11

Sony Corporation
Audio Group

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90D0560-1
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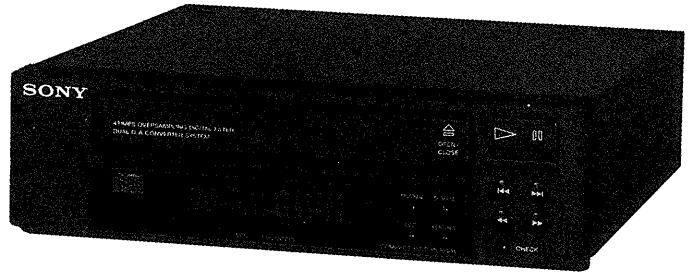
CDP-H300

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model



This set is the CD player section in MHC-2500/3500/FH-E626CD.

SPECIFICATIONS

System	Compact disc digital audio system
Laser	Semiconductor laser (λ = 780 nm) Emission duration: continuous
Laser output	Max. 44.6 μW* * This output is the value measured at distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.
Frequency response	5 Hz – 20 kHz (+0.5/–2.0 dB)
Signal to noise ratio	More than 90 dB
Dynamic range	More than 90 dB
Harmonic distortion	Less than 0.05% (at 1 kHz)
Channel separation	More than 90 dB
Output level	2 V (at 50 kilohms)
Load impedance	Over 10 kilohms
Dimensions	Approx. 225 × 65 × 225 mm (w/h/d) ($9 \times 2\frac{5}{8} \times 9$ inches)
Weight	Approx. 2 kg (4 lb 6 oz)
Power requirement	120V 60Hz } Canadian Model
Power consumption	10W } Canadian Model

Model Name Using Similar Mechanism	HCD-H7/H1500
CD Transport Mechanism Type	CDM13A-5BD3
Optical Pick-Up Block Type	BU-5BD3

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

COMPACT DISC PLAYER

SONY®

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

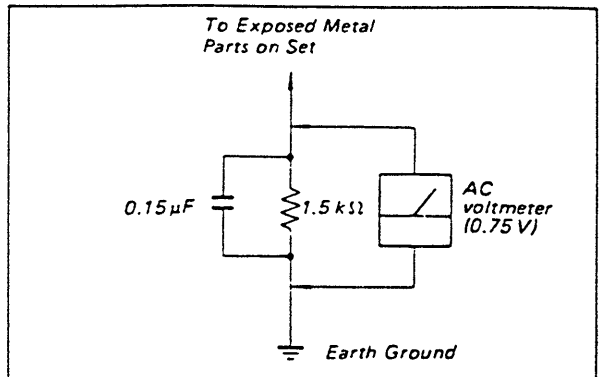


Fig. A. Using an AC voltmeter to check AC leakage.

SERVICING NOTE

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

CAUTION

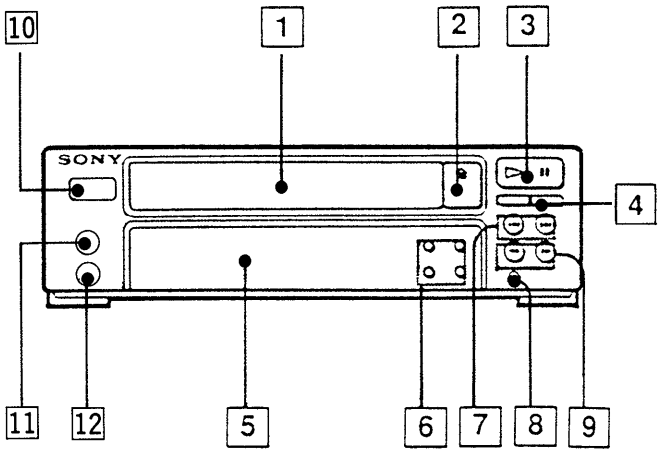
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

SECTION 1
GENERAL

1-1. LOCATION OF CONTROLS

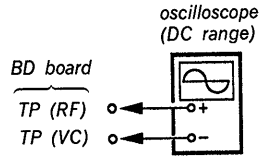


[1] Disc compartment
[2] ⏏ OPEN/CLOSE button
[3] ▷II (play/pause) button
[4] ■ (stop) button
[5] Display window
[6] PLAY mode selectors
PROGRAM button
SHUFFLE button
EDIT button
CONTINUE button
[7] ⏮ / ⏭ (Automatic Music Sensor) buttons
[8] REPEAT button
[9] ◀◀ / ▶▶ (manual search) buttons
[10] POWER ON/OFF
[11] PHONE LEVEL
[12] HEADPHONES
} Canadian model

SECTION 2
ELECTRICAL ADJUSTMENTS

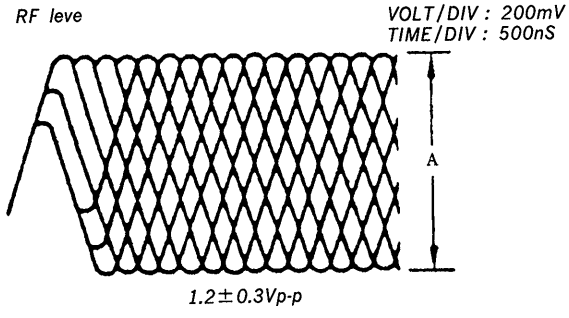
1. Perform adjustments in the order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than 10MΩ impedance.

RF Level Check
Procedure :



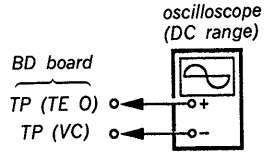
1. Connect oscilloscope to test point TP (RF) and TP (VC) on BD board.
2. Confirm that RF level and eye pattern is optimum.
   Oputimum eye pattern means that shape "◇" can be clearly distinguished at the center of the wave form.

RF signal Reference Waveform (eye pattern)



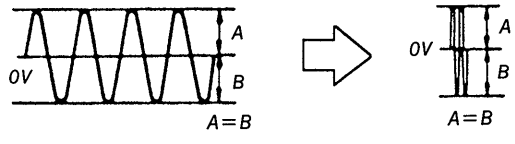
REFERENCE

E-F Balance Check
Procedure :

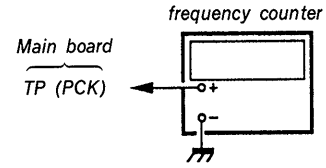


1. Connect test point TP (ADJ) and TP (TES) to ground with lead wire.
2. Connect oscilloscope to test point TP (TE O) and TP (VC) on BD board.
3. Turn POWER switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0V.
6. After check, remove the lead wire connected in step 1.

Note : Take sweep time as long as possible to obtain best waveform.



RF PLL Free-run Frequency Check
Procedure :



1. Turn POWER switch on.
2. Put disc (YEDS-18) in and playback.
3. Confirm that reading on frequency counter is 4.3218MHz.

Focus/Tracking Gain Adjustment

A frequency responce analyzer is necessary in order to perform this adjustment exactly.

However, this gain cas a margin, so even if it is slightly off. there is no problem. Therefore, do not perform this adjustment.

Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate.

However, as these reciprocate, the adjustment is the point where both are satisfied.

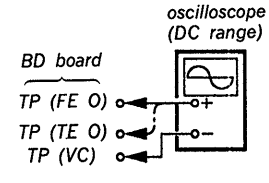
- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

Symptoms \ Gain	Focus	Tracking
• The time until music starts becmes longer for STOP →▷ PLAY or automatic selection. (⏮, ⏭ buttons pressed.) (Normally takes about 1 seconds.)	low	low or high
• Music does not start and disc continues to rotate for STOP →▷ PLAY or automatic selection. (⏮, ⏭ buttons pressed.)	—	low
• Sound is interrupted during PLAY. Or time counter display stops progressing.	—	low
• More noise during 2-axis device operation.	high	high

The following is a simple adjustment method.

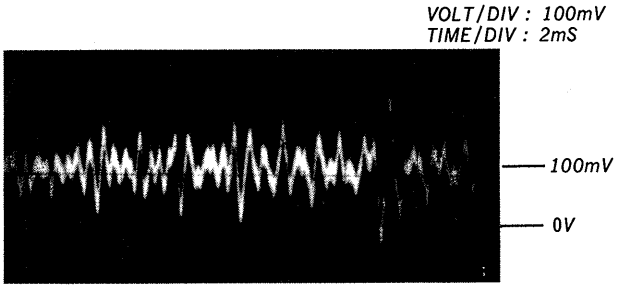
—Primary Adjustment—

Note : Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment.
If the positions after the primary adjustment are only a little different, returs the controls the original position.

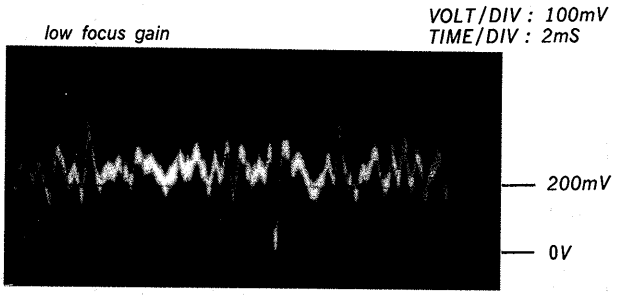


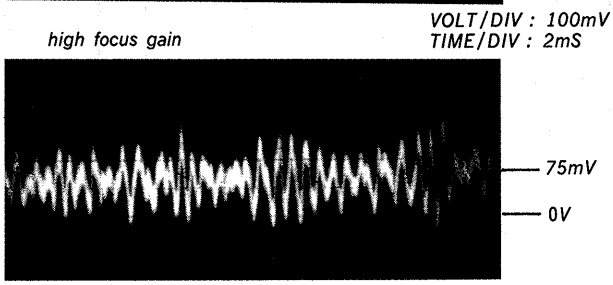
Procedure :

1. Keep the set horizontal.
   If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2-axis device.
2. Insert disc (YEDS-18) and press ▷ PLAY button.
3. Connect oscilloscope to TP (FEO) and TP (VC) on BD board.
4. Adjustment RV101 on digital board so that the waveform is as shown in the figure below. (focus gain adjustment)

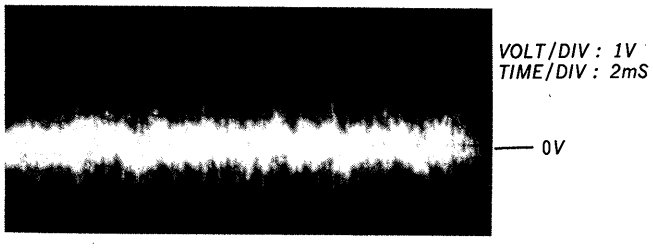


• Incorrent Examples (DC level changes more than on adjusted waveform)

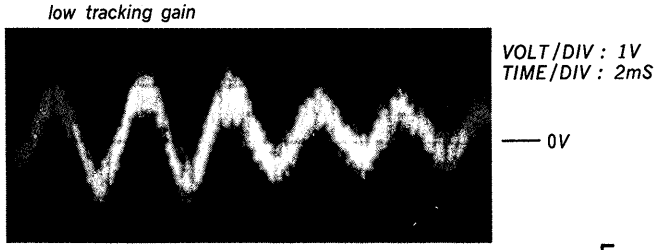


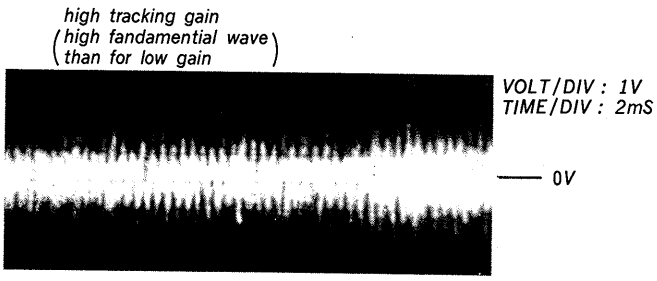


5. Connect oscilloscope to TP (TEO) and TP (VC) on BD board.
6. Adjusted MV102 on digital board so that the waveform is as shown the flgure below. (tracking gain adjustment)



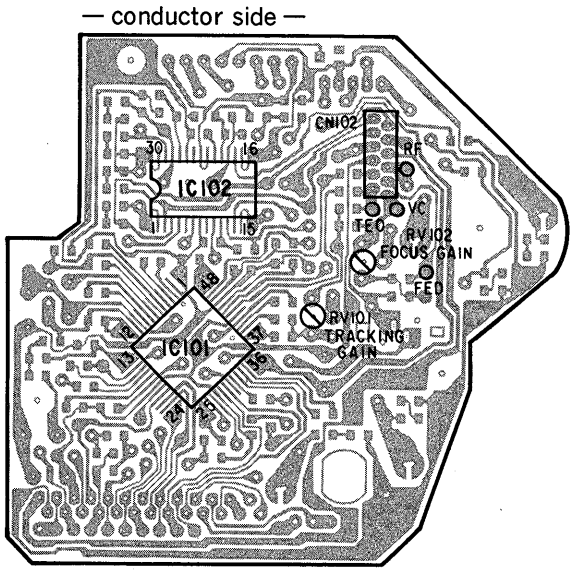
• Incorrect Examples (fundamentia wave appears)



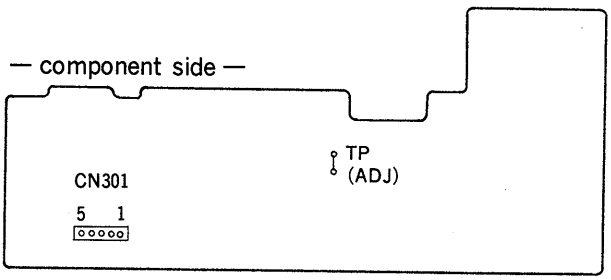


Adjustment Locations :

[BD board]



[Main board]



SECTION 3
DIAGRAMS

3-1. SEMICONDUCTOR LEAD LAYOUTS

M5F7807

EC10DS2

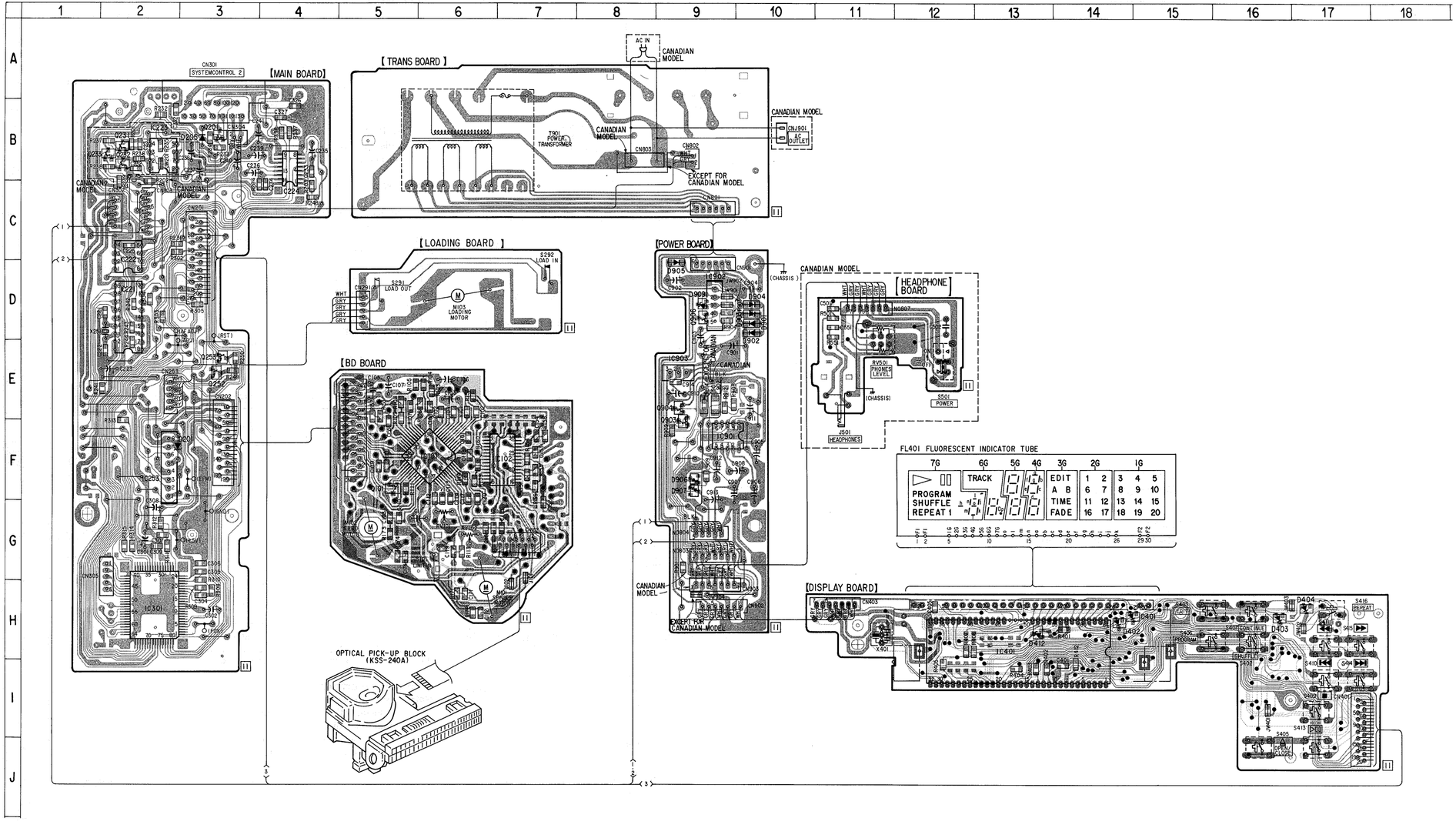
UZ-4.7BSC
1SS120

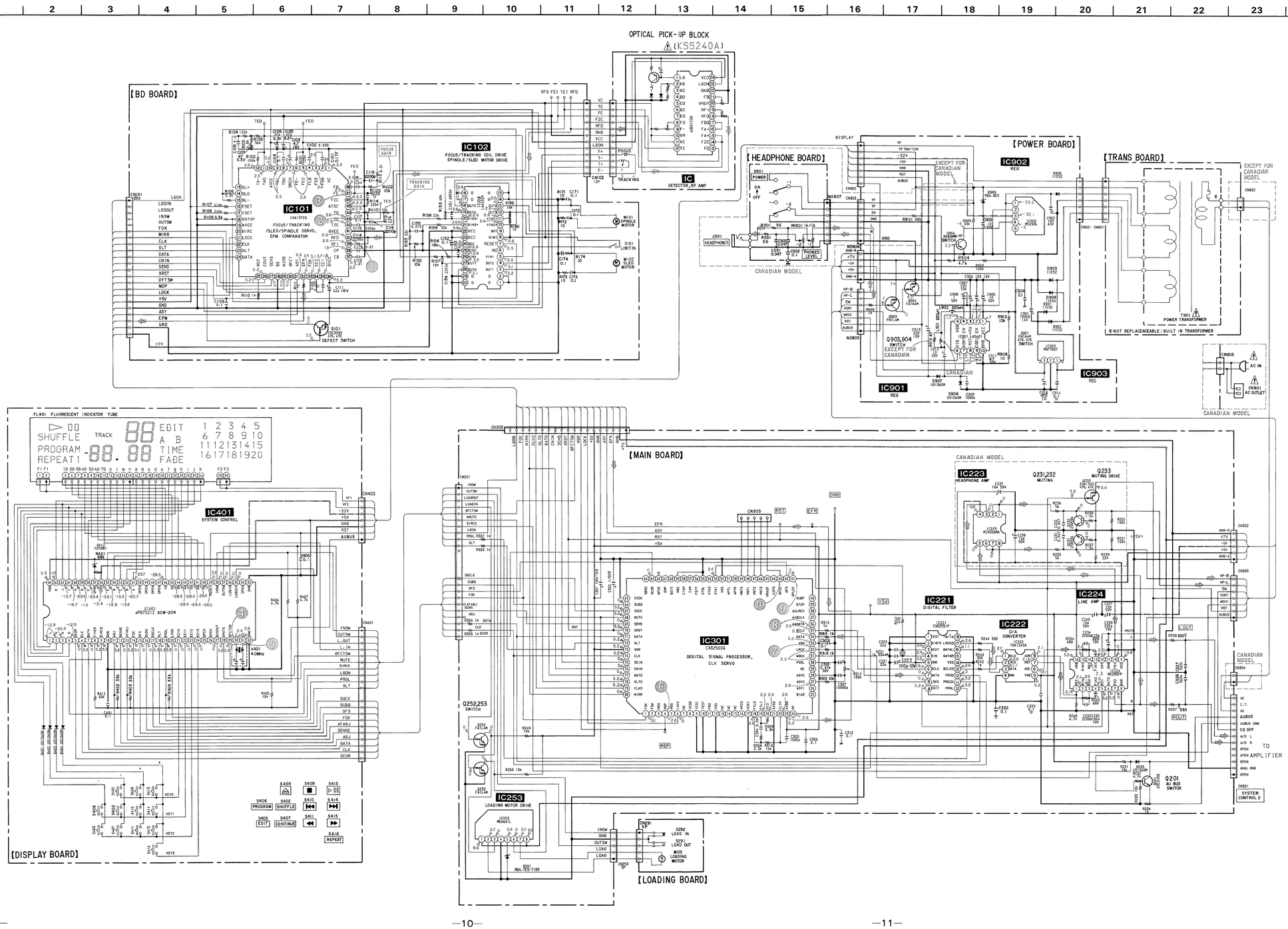
• Semiconductor Location

Ref. No.	Location
D201	F-2
D205	B-3
D401	H-15
D402	H-14
D403	H-16
D404	H-17
D412	H-13
D901	D-10
D902	D-10
D903	D-10
D904	D-10
D905	D-9
D906	F-9
D907	F-9
D909	D-9
IC101	F-6
IC102	F-7
IC221	D-2
IC222	C-2
IC223	B-2
IC224	B-4
IC253	F-2
IC301	H-2
IC401	H-13
IC901	F-9
IC902	D-9
IC903	E-9
Q101	F-5
Q201	B-3
Q231	B-2
Q232	B-2
Q233	B-2
Q252	E-3
Q253	E-3
Q903	E-9
Q904	E-9
Q906	D-9

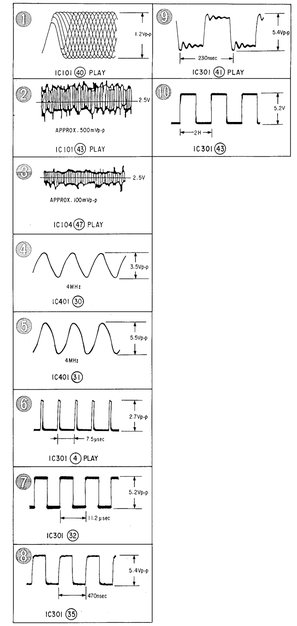
Note:
- ○—— : parts extracted from the component side.
- ● : Through hole.
- ▒▒ : Pattern on the side which is seen.
- ▒▒ : Pattern of the rear side.

3-2. PRINTED WIRING BOARDS





● Waveforms



Note:

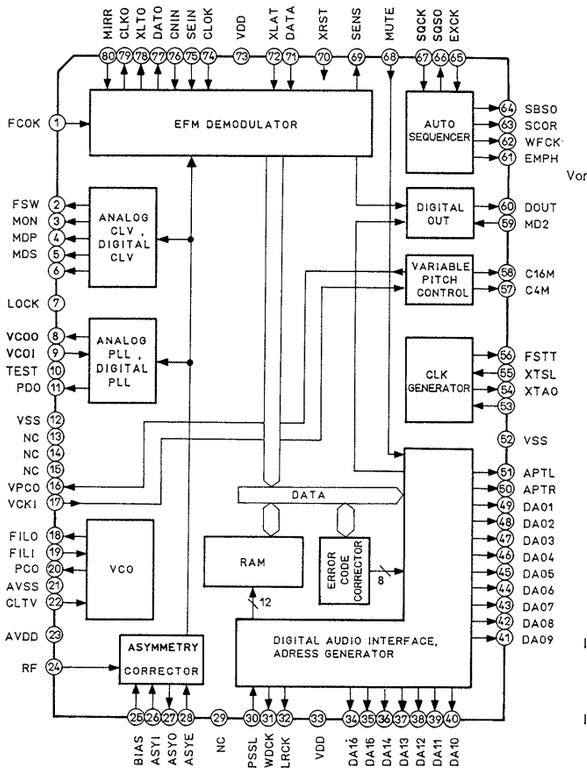
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.

Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

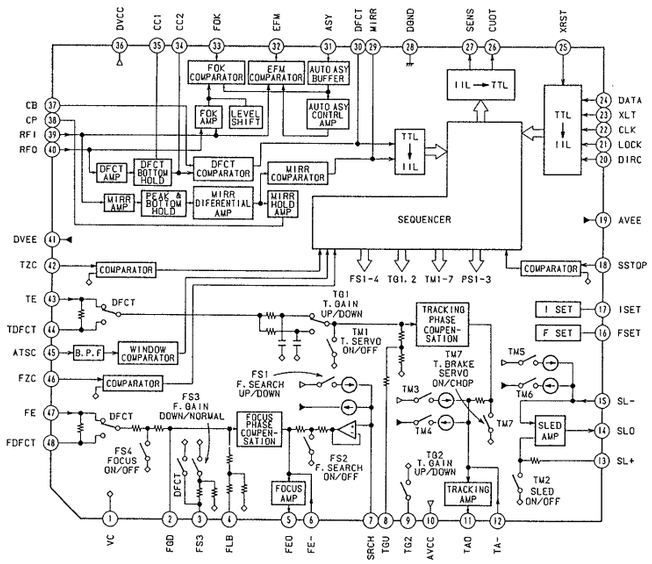
- ▭▭▭ : B+ Line
- ▭▭▭ : B− Line
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : STOP
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
- Circled numbers refer to waveforms.
- Signal path.
  ⇛ : CD

• IC Block Diagrams

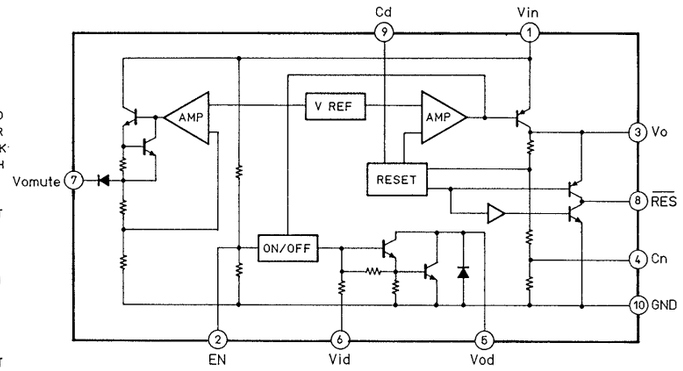
IC301 CXD2500Q



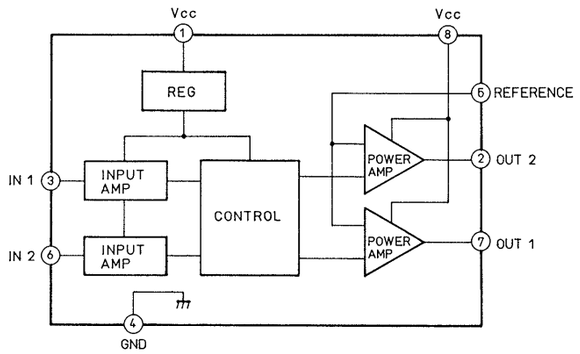
IC101 CXA1372Q



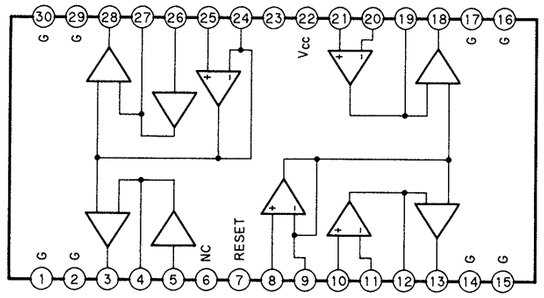
IC901 LA5601



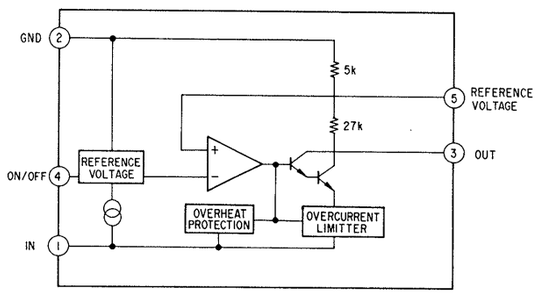
IC253 M54641L



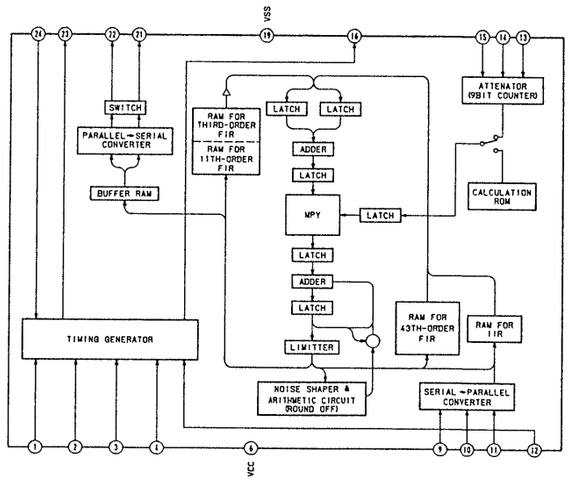
IC102 LA6532M



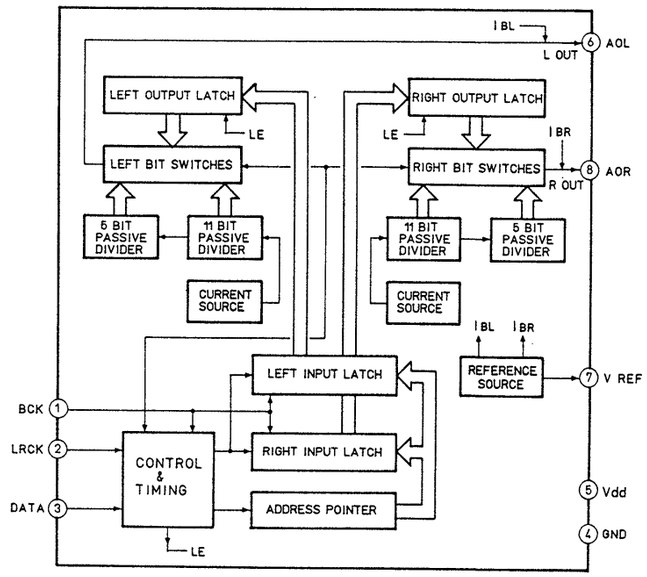
IC902 M5293L



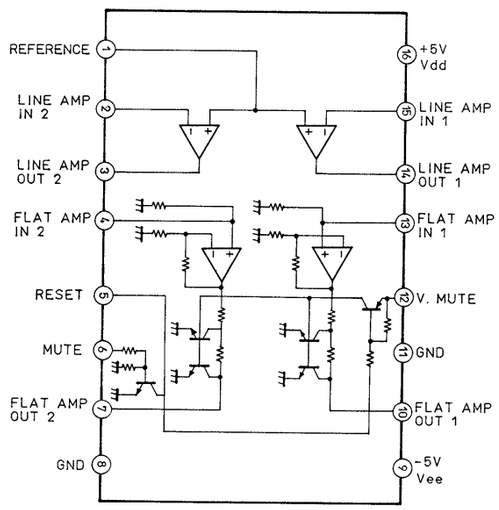
IC221 CXD2551P



IC222 TDA1543A



IC224 M5285FP



SECTION 4
EXPLODED VIEWS

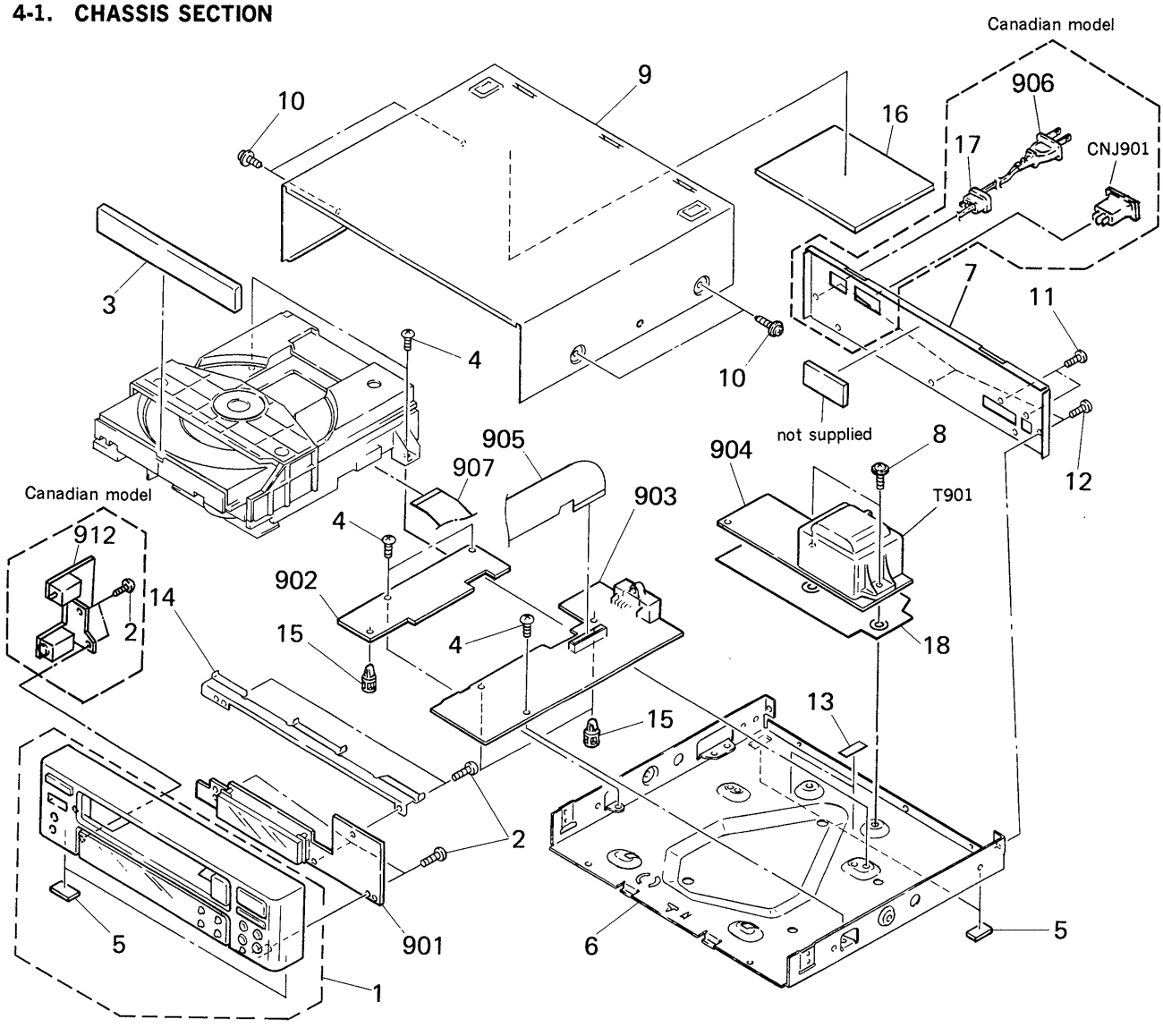
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
  Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ ↑
  Cabinet's Color Parts' Color

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifé.

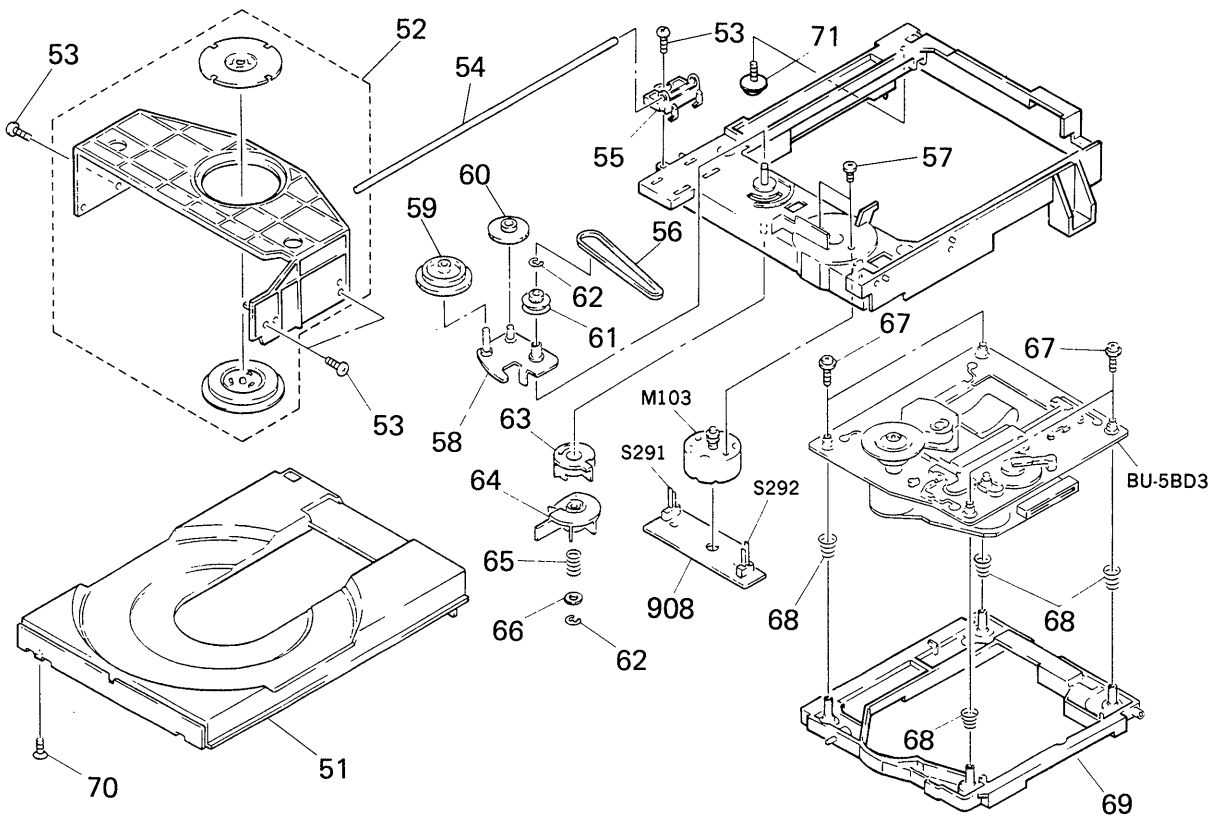
4-1. CHASSIS SECTION



Ref.No	Part No.	Description	Remarks
1	X-4929-711-1	(Except for Canadian)....PANEL ASSY, FRONT	
1	X-4929-712-1	(Canadian)....PANEL ASSY, FRONT	
2	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
3	4-929-753-01	PANEL, LOADING	
4	7-682-547-04	SCREW +BVTT 3X6 (S)	
5	4-930-336-01	FOOT (FELT)	
6	*4-929-757-01	CHASSIS	
7	*4-929-750-31	(Except for Canadian)....PANEL, BACK	
7	*4-929-750-41	(Canadian)....PANEL, BACK	
8	4-929-742-01	SCREW (3X10), +PTTWH	
9	4-932-844-31	(Except for E)....CASE	
9	4-932-844-41	(E)....CASE	
10	3-704-366-01	SCREW (CASE) (M3X8)	
11	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
12	7-682-547-09	SCREW +BVTT 3X6 (S)	
13	3-831-441-XX	CUSHION (B), CABINET	
14	*4-929-752-01	(Canadian)....REINFORCEMENT	

Ref.No	Part No.	Description	Remarks
15	3-682-057-11	SPACER (SMALL)	
16	*4-922-943-01	DUMPER	
17	*3-703-571-11	(Canadian)....BUSHING (S)(4516) CORD	
18	*4-929-711-01	(Canadian)....COVER (A), POWER	
19	*3-846-311-00	SPACER (D)	
901	*A-4617-397-A	MOUNTED PCB, DISPLAY	
902	*A-4617-507-A	(Canadian)....MOUNTED PCB, POWER	
902	*A-4617-400-A	(Except for Canadian)....MOUNTED PCB, POWER	
903	*A-4617-399-A	(Except for Canadian)....MOUNTED PCB, MAIN	
903	*A-4617-506-A	(Canadian)....MOUNTED PCB, MAIN	
904	*1-634-469-11	PC BOARD, TRANS	
906	⚠1-558-945-11	(Canadian)....CORD, POWER	
907	1-535-845-11	JUMPER, FILM (WITH TERMINAL)	
912	1-634-472-11	(Canadian)....PC BOARD HEADPHONES	
CNJ901	⚠1-526-882-11	(Canadian)....OUTLET, AC	
T901	⚠1-449-977-11	(Except for Canadian)....TRANSFORMER, POWER	
T901	⚠1-450-032-11	(Canadian)....TRANSFORMER, POWER	

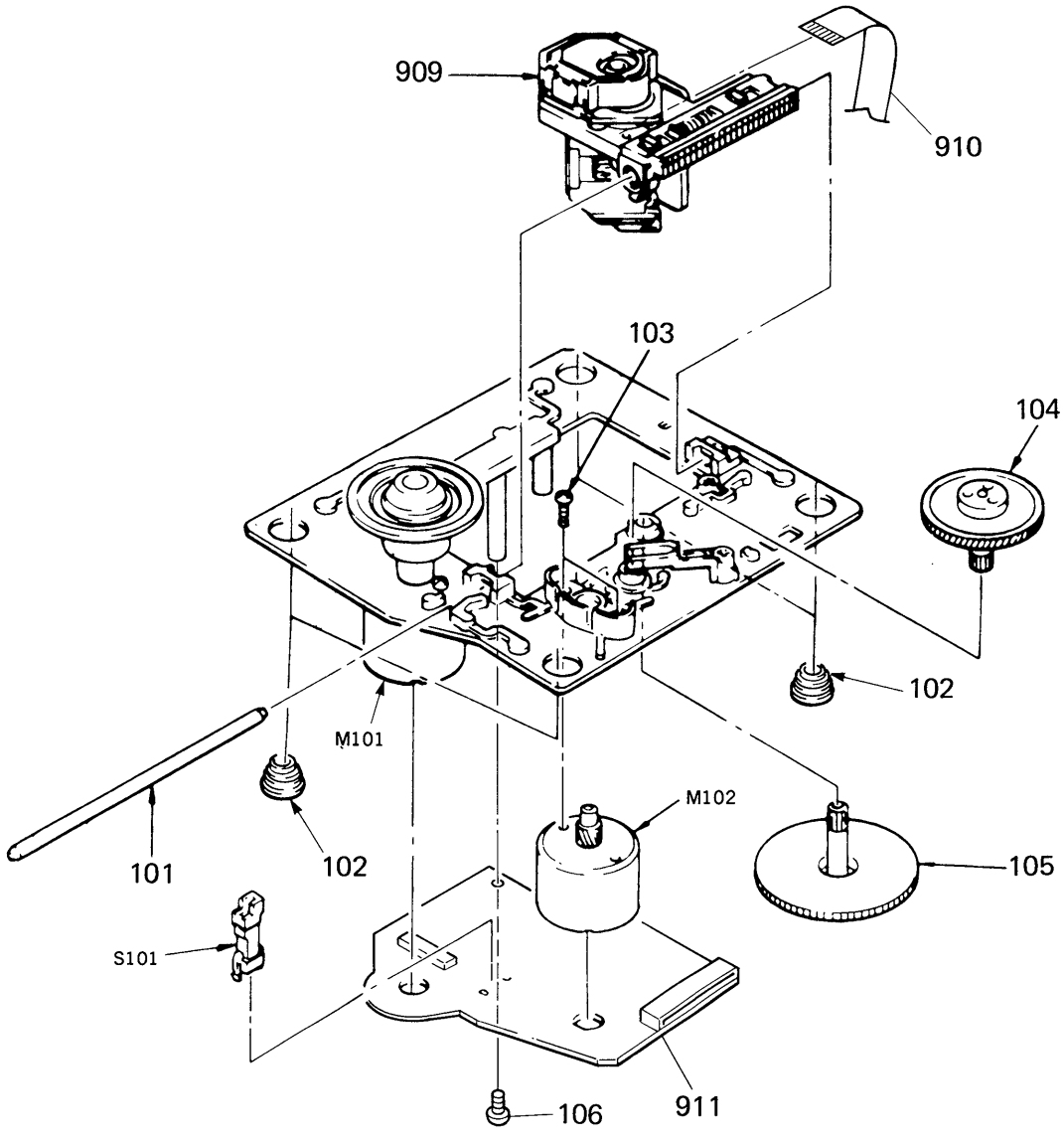
4-2. CD MECHANISM SECTION (CDM13A-5BD3)



Ref.No	Part No.	Description	Remarks
51	4-929-732-01	TABLE, DISK	
52	A-4604-219-A	HOLDER (MG) ASSY	
53	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
54	4-929-721-01	SHAFT	
55	4-929-723-01	GUIDE (T)	
56	4-927-649-01	BELT	
57	7-621-775-10	SCREW +B 2.6X4	
58	X-4929-703-1	ARM ASSY, SWING	
59	4-927-620-01	GEAR (P)	
60	4-927-628-01	GEAR (C)	
61	4-929-724-01	PULLEY (B)	
62	7-624-105-04	STOP RING 2.3, TYPE -E	
63	4-929-727-01	CAM (A)	

Ref.No	Part No.	Description	Remarks
64	4-929-729-01	CAM (B)	
65	3-659-338-00	SPRING, COMPRESSION	
66	4-927-654-01	WASHER (LIMITER)	
67	4-933-134-01	SCREW (+PTPWH M2.6X6)	
68	4-917-541-01	SPRING (B)	
69	4-929-747-01	HOLDER (BU)	
70	7-685-234-19	SCREW +KTP 2.6X8 TYPE2NON-SLIT	
71	* 4-917-583-21	BRACKET, YOKE	
908	* 1-634-461-11	PC BOARD LOADING	
M103	A-4608-362-A	MOTOR (L) ASSY	
S291	1-571-924-11	SWITCH, LEAF (LOAD OUT)	
S292	1-571-924-11	SWITCH, LEAF (LOAD IN)	

4-3. OPTICAL PICK-UP BLOCK (BU-5BD3)



Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No	Part No.	Description	Remarks
101	4-917-565-01	SHAFT, SLED	
102	4-933-126-01	INSULATOR (A)	
103	7-621-255-15	SCREW +P 2X3	
104	4-917-567-01	GEAR (M)	
105	4-917-564-01	GEAR (P), FLATNESS	
106	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	

Ref.No	Part No.	Description	Remarks
909	⚠8-848-144-11	DEVICE, OPTICAL KSS-240A	
910	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
911	*A-4617-371-A	MOUNTED PCB, BD	
M101	X-4917-523-3	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	
S101	1-572-085-11	SWITCH,LEAF(LIMIT IN)	

SECTION 5
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA...,
UPC...: μPC, UPD...: μPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No	Part No.	Description
901	*A-4617-397-A	MOUNTED PCB, DISPLAY
902	*A-4617-507-A	(Canadian)....MOUNTED PCB, POWER
902	*A-4617-400-A	(Except for Canadian)....MOUNTED PCB, POWER
903	*A-4617-399-A	(Except for Canadian)....MOUNTED PCB, MAIN
903	*A-4617-506-A	(Canadian)....MOUNTED PCB, MAIN
904	*1-634-469-11	PC BOARD, TRANS
906	⚠1-558-945-11	(Canadian)....CORD, POWER
907	1-535-845-11	JUMPER, FILM (WITH TERMINAL)
908	*1-634-461-11	PC BOARD LOADING
909	⚠8-848-144-11	DEVICE, OPTICAL KSS-240A
910	1-575-001-11	WIRE, FLAT TYPE (12 CORE)
911	*A-4617-371-A	MOUNTED PCB, BD
912	1-634-472-11	PC BOARD HEADPHONES

CAPACITOR

C101	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C102	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C103	1-126-094-11	ELECT	4.7MF	20%	16V
C104	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C105	1-126-154-11	ELECT	47MF	20%	6.3V
C106	1-126-154-11	ELECT	47MF	20%	6.3V
C107	1-126-154-11	ELECT	47MF	20%	6.3V
C108	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C109	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C110	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C111	1-131-367-00	TANTALUM	22MF	20%	16V
C112	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C113	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C114	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C115	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C116	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C117	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C118	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C119	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C120	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C151	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C152	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C153	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C154	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C155	1-163-023-00	CERAMIC CHIP	0.015MF	10%	50V
C171	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C172	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C173	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C174	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C221	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C222	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C223	1-124-443-00	ELECT	100MF	20%	10V
C225	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C231	1-163-035-00	(Canadian).... CERAMIC CHIP	0.047MF		50V
C232	1-163-035-00	(Canadian).... CERAMIC CHIP	0.047MF		50V
C233	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C234	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C235	1-124-443-00	ELECT	100MF	20%	10V
C236	1-126-176-11	ELECT	220MF	20%	10V
C237	1-123-875-11	(Canadian)....ELECT	10MF	20%	50V
C238	1-123-875-11	(Canadian)....ELECT	10MF	20%	50V
C239	1-126-176-11	ELECT	220MF	20%	10V
C240	1-123-875-11	ELECT	10MF	20%	50V
C241	1-123-875-11	ELECT	10MF	20%	50V
C301	1-124-443-00	ELECT	100MF	20%	10V
C302	1-124-791-11	ELECT	1MF	20%	50V
C304	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C305	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C306	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C307	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C308	1-124-902-00	ELECT	0.47MF	20%	50V
C309	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C312	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C326	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C327	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C332	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C401	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C405	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C501	1-163-035-00	(Canadian).... CERAMIC CHIP	0.047MF		50V
C502	1-136-165-00	(Canadian)....FILM	0.1MF	5%	50V
C551	1-163-035-00	(Canadian).... CERAMIC CHIP	0.047MF		50V
C901	1-126-939-11	ELECT	10000MF	20%	16V
C902	1-124-572-11	ELECT	100MF	20%	63V
C903	1-123-875-11	ELECT	10MF	20%	50V
C904	1-136-165-00	FILM	0.1MF	5%	50V
C905	1-123-875-11	ELECT	10MF	20%	50V
C906	1-124-443-00	ELECT	100MF	20%	10V
C907	1-126-923-11	ELECT	220MF	20%	10V
C908	1-124-791-11	ELECT	1MF	20%	50V
C909	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C910	1-124-472-11	ELECT	470MF	20%	10V
C911	1-124-927-11	ELECT	4.7MF	20%	50V
C912	1-123-875-11	ELECT	10MF	20%	50V
C913	1-126-923-11	ELECT	220MF	20%	10V
C914	1-136-165-00	FILM	0.1MF	5%	50V

CN101	1-568-796-11	SOCKET, CONNECTOR 22P
CN102	1-568-795-11	SOCKET, CONNECTOR 12P
CN201	1-568-838-11	SOCKET, CONNECTOR 21P
CN202	1-568-802-11	SOCKET, CONNECTOR 19P
CN253	*1-564-339-00	PIN, CONNECTOR 5P
CN291	*1-564-498-11	PIN, CONNECTOR 5P
CN301	*1-565-291-11	SOCKET, CONNECTOR 13P (SYSTEM CONTROL2)
CN302	*1-564-339-00	PIN, CONNECTOR 5P
CN303	*1-564-341-11	PIN, CONNECTOR 7P
CN305	*1-564-339-00	PIN, CONNECTOR 5P
CN401	1-569-566-11	SOCKET, CONNECTOR 20P
CN801	1-568-668-11	CONNECTOR, BOARD TO BOARD 6P
CN802	*1-564-336-00	(Except for Canadian)....PIN, CONNECTOR 2P
CN803	*1-564-321-11	(Canadian)....PIN, CONNECTOR 2P
CN901	1-568-662-11	CONNECTOR, BOARD TO BOARD 6P

Ref.No	Part No.	Description
CN902	*1-564-341-11	PIN, CONNECTOR 7P
CN903	*1-564-341-11	PIN, CONNECTOR 7P
CNJ901	⚠1-526-882-11	(Canadian)....OUTLET, AC
D201	8-719-010-34	DIODE UZ-4.7BSC
D205	8-719-912-20	DIODE 1SS120
D401	8-719-400-18	DIODE MA152WK
D402	8-719-400-18	DIODE MA152WK
D403	8-719-400-18	DIODE MA152WK
D404	8-719-400-18	DIODE MA152WK
D412	8-719-106-36	DIODE RD8.2M-B3
D901	8-719-210-33	DIODE EC10DS2
D902	8-719-210-33	DIODE EC10DS2
D903	8-719-210-33	DIODE EC10DS2
D904	8-719-210-33	DIODE EC10DS2
D905	8-719-210-33	DIODE EC10DS2
D906	8-719-104-34	DIODE 1S2836
D907	8-719-104-34	DIODE 1S2836
D909	8-719-106-17	DIODE RD6.8M-B2
FLD401	1-519-600-11	INDICATOR TUBE, FLUORESCENT
IC101	8-752-037-33	IC CXA1372Q
IC102	8-759-821-94	IC LA6532M
IC221	8-752-334-06	IC CXD2551P
IC222	8-759-990-13	IC TDA1543A
IC223	8-759-945-58	(Canadian)....IC RC4558P
IC224	8-759-633-66	IC M5285FP
IC253	8-759-633-65	IC M54641L
IC301	8-752-333-31	IC CXD2500Q
IC401	8-759-149-38	IC UPD75212ACW-190
IC901	8-759-821-93	IC LA5601
IC902	8-759-633-42	IC M5293L
IC903	8-759-604-86	IC M5F7807
J101	1-216-295-00	METAL GLAZE 0 5% 1/10W
J102	1-216-295-00	METAL GLAZE 0 5% 1/10W
J501	1-507-967-31	(Canadian)....JACK (HEADPHONES)
JW201	1-216-295-00	METAL GLAZE 0 5% 1/10W
JW401	1-216-295-00	METAL GLAZE 0 5% 1/10W
JW402	1-216-295-00	METAL GLAZE 0 5% 1/10W
JW403	1-216-295-00	METAL GLAZE 0 5% 1/10W
L901	1-410-658-31	INDUCTOR CHIP 220UH
M101	X-4917-523-3	MOTOR ASSY (SPINDLE)
M102	X-4917-504-1	MOTOR ASSY (SLED)
M103	A-4608-362-A	MOTOR (L) ASSY
Q101	8-729-901-01	TRANSISTOR DTC144EK
Q201	8-729-100-66	TRANSISTOR 2SC1623
Q231	8-729-141-75	(Canadian)....TRANSISTOR 2SD596DV345
Q232	8-729-141-75	(Canadian)....TRANSISTOR 2SD596DV345
Q233	8-729-113-66	(Canadian)....TRANSISTOR FN1L4M-M31
Q252	8-729-112-97	TRANSISTOR FA1L4M-L31
Q253	8-729-112-97	TRANSISTOR FA1L4M-L31
Q903	8-729-113-66	TRANSISTOR FN1L4M-M31
Q904	8-729-113-13	TRANSISTOR FA1A4M-L33
Q906	8-729-216-22	TRANSISTOR 2SA1162

RESISTOR

R101	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R102	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R103	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R104	1-216-099-00	METAL GLAZE	120K	5%	1/10W
R105	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R106	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R107	1-216-114-00	METAL GLAZE	510K	5%	1/10W
R108	1-216-105-00	METAL GLAZE	220K	5%	1/10W
R109	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R110	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R111	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R112	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R113	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R114	1-216-105-00	METAL GLAZE	220K	5%	1/10W
R152	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R153	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R154	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R155	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R156	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R157	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R158	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R159	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R160	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R171	1-216-001-00	METAL GLAZE	10	5%	1/10W
R172	1-216-001-00	METAL GLAZE	10	5%	1/10W
R173	1-216-001-00	METAL GLAZE	10	5%	1/10W
R174	1-216-001-00	METAL GLAZE	10	5%	1/10W
R201	1-216-097-00	(Canadian).... METAL GLAZE	100K	5%	1/10W
R202	1-216-097-00	(Canadian).... METAL GLAZE	100K	5%	1/10W
R203	1-216-045-00	METAL GLAZE	680	5%	1/10W
R204	1-216-045-00	METAL GLAZE	680	5%	1/10W
R231	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R232	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R233	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R234	1-216-001-00	METAL GLAZE	10	5%	1/10W
R235	1-216-019-00	(Canadian).... METAL GLAZE	56	5%	1/10W
R236	1-216-019-00	(Canadian).... METAL GLAZE	56	5%	1/10W
R237	1-216-053-00	(Canadian).... METAL GLAZE	1.5K	5%	1/10W
R238	1-216-053-00	(Canadian).... METAL GLAZE	1.5K	5%	1/10W
R241	1-216-041-00	METAL GLAZE	470	5%	1/10W
R242	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R243	1-216-037-00	METAL GLAZE	330	5%	1/10W
R244	1-216-037-00	METAL GLAZE	330	5%	1/10W
R248	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R249	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R250	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R302	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R303	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R304	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R305	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R308	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R309	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R310	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R311	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R312	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R313	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R314	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R315	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R337	1-216-037-00	METAL GLAZE	330	5%	1/10W
R338	1-216-037-00	METAL GLAZE	330	5%	1/10W
R401	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R402	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R403	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R404	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R405	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R406	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R407	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Note:
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No	Part No.	Description			
R412	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R501	1-216-019-00	(Canadian).... METAL GLAZE	56	5%	1/10W
R551	1-216-019-00	(Canadian).... METAL GLAZE	56	5%	1/10W
R901	1-216-025-00	METAL GLAZE	100	5%	1/10W
R903	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R904	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R905	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R906	1-216-017-00	METAL GLAZE	47	5%	1/10W
R908	1-216-001-00	METAL GLAZE	10	5%	1/10W
R909	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R912	1-216-073-00	METAL GLAZE	10K	5%	1/10W
RV101	1-238-016-11	RES, ADJ, CARBON 10K			
RV102	1-238-016-11	RES, ADJ, CARBON 10K			
RV501	1-238-302-11	(Canadian)....RES,VER,CARBON 1K/1K (PHONES LEVEL)			
S101	1-572-085-11	SWITCH, LEAF (LIMIT IN)			
S291	1-571-924-11	SWITCH, LEAF (LOAD OUT)			
S292	1-571-924-11	SWITCH, LEAF (LOAD IN)			
S402	1-554-596-21	SWITCH, KEY BOARD (SHUFFLE)			
S403	1-554-596-21	SWITCH, KEY BOARD (EDIT)			
S405	1-554-596-21	SWITCH, KEY BOARD (⏏OPEN/CLOSE)			
S406	1-554-596-21	SWITCH, KEY BOARD (PROGRAM)			
S407	1-554-596-21	SWITCH, KEY BOARD (CONTINUE)			
S409	1-554-596-21	SWITCH, KEY BOARD (■)			
S410	1-554-596-21	SWITCH, KEY BOARD (⏮)			
S411	1-554-596-21	SWITCH, KEY BOARD (◀◀)			
S413	1-554-596-21	SWITCH, KEY BOARD (▷II)			
S414	1-554-596-21	SWITCH, KEY BOARD (▶▶I)			
S415	1-554-596-21	SWITCH, KEY BOARD (▶▶)			
S416	1-572-184-11	SWITCH, KEY BOARD (REPEAT)			
S501	⚠1-552-98-00	(Canadian)....SWITCH (POWER)			
T901	⚠1-449-977-11	(Except for Canadian)....TRANSFORMER, POWER			
T901	⚠1-450-032-11	(Canadian)....TRANSFORMER, POWER			
X251	1-567-908-11	VIBRATOR, CRYSTAL (16.9344MHz)			
X401	1-577-358-21	VIBRATOR, CERAMIC (4.0MHz)			

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

9-955-691-11

Sony Corporation
Audio Group

English
90C0489-1
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CDP-H300

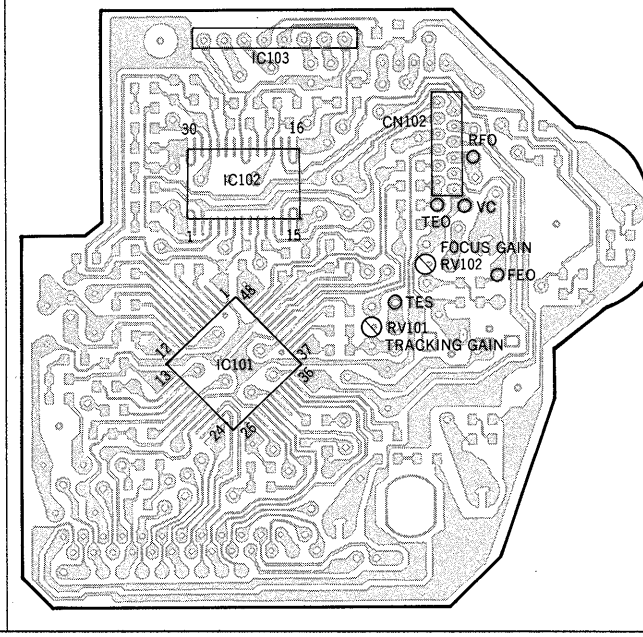
SONY
SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model

CORRECTION-1

Correct your service manual as shown below.

☛ : indicates corrected portion.

Page	INCORRECT	CORRECT
4	**E-F Balance Check** **Procedure :** 1. Connect test point TP (ADJ) and TP (TES) to ground with lead wire.	**E-F Balance Check** **Procedure :** 1. Connect test point TP (ADJ) to ground and TP (TES) to TP (VC) with lead wire.
5	**Focus/Tracking Gain Adjustment** 4. Adjustment RV101 on digital board so that the waveform is as shown in the figure below. (focus gain adjustment) 6. Adjusted MV102 on digital board so that the waveform is as shown the flgure below. (tracking gain adjustment)	**Focus/Tracking Gain Adjustment** 4. Adjust RV102 on BD board so that the waveform is as shown in the figure below. (focus gain adjustment) 6. Adjust RV101 on BD board so that the waveform is as shown in the figure below. (tracking gain adjustment)
5		Adjustment Location : 【BD board】 

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CDP-H300

SONY
SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model

CORRECTION-2

Correct your service manual as shown below.

☛ : **indicates corrected portion.**

Page	INCORRECT	CORRECT
15	No. Part No. Discription ———	No. Part No. Discription ☛ 905 1-533-833-11 JUMPER FILM

9-955-691-92

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Audio Group

English
91K0492-1
Printed in Japan
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CDP-H300

SONY
SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model

CORRECTION-3

Correct your service manual as shown below.

☛ : **indicates corrected portion.**

Page	INCORRECT			CORRECT	
	No.	Part No.	Description	Part No.	Description
15	905	1-533-833-11	JUMPER FILM	1-535-833-11 ☛	JUMPER FILM

9-955-691-93

Sony Corporation
Audio Group

English
92C0496-1
Printed in Japan
© 1992.3
Published by Customer Relations and Service Group

TC-H500

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model

This set is the cassette deck section in MHC-2500, MHC-3500, MHC-5500.

Model Name Using Similar Mechanism	TC-818M
Tape Transport Mechanism Type	Deck A TCM-170RA1
	Deck B TCM-170RB7

SPECIFICATIONS

Recording system	4-track 2-channel stereo
Frequency response	(DOLBY NR OFF)
	40 – 13,000 Hz (±3 dB), using TYPE I cassette (Sony HF-S)
	40 – 14,000 Hz (±3 dB), using TYPE II cassette
	40 – 15,000 Hz (±3 dB), using TYPE IV cassette
Wow and flutter	0.1% WRMS ±0.3% (DIN)
Dimensions	Approx. 225 × 118 × 235 mm (w/h/d) ($9 \times 4^{3}/_{4} \times 9^{3}/_{8}$ inches)
Weight	Approx. 2.5 kg (5 lb 8 oz)

Design and specifications subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

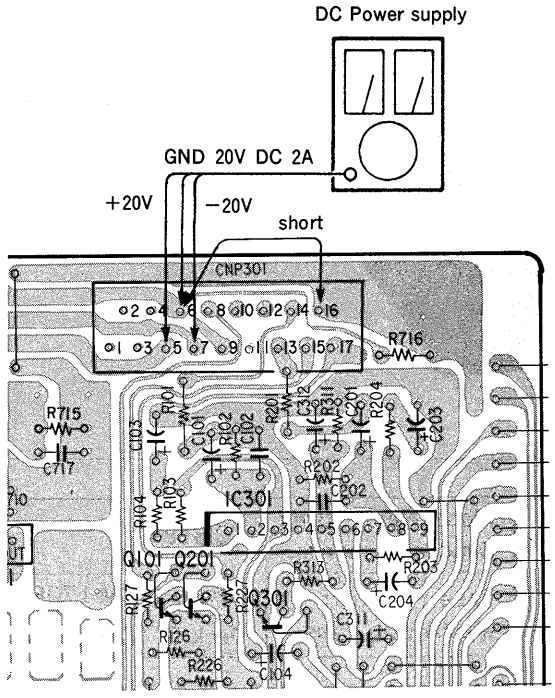
STEREO CASSETTE DECK

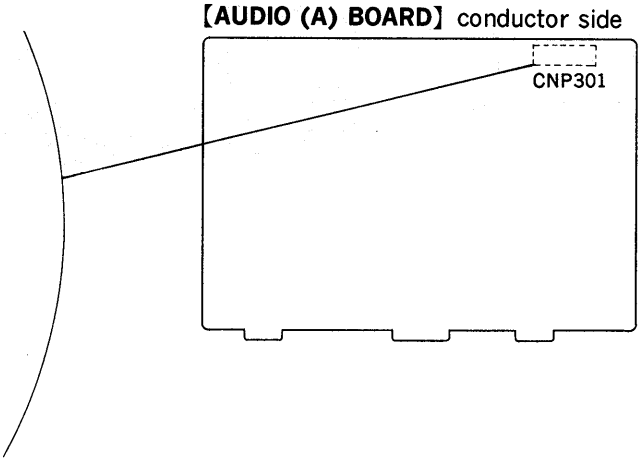
SONY®

REPAIRING PRECAUTION

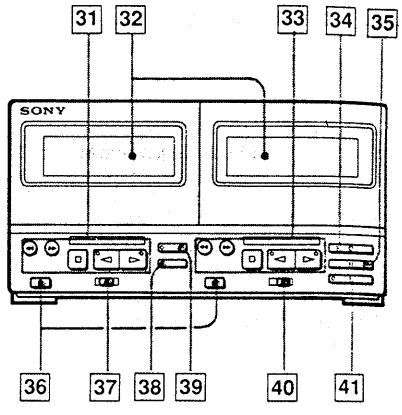
[To apply B+ voltage]

Thepower of this unit is fed from amlifier.
Because of this, connect the DC Power supply as illustrated below when this unit alone operates.





SECTION 1
GENERAL



31 Tape operation buttons for deck A
◀◀ / ▶▶: Fast winding
□ : Stop
◁: Reverse play
▷: Forward play
32 Cassette holders
33 Tape operation buttons for deck B
34 REC (recording) button
35 PAUSE button
36 EJECT buttons
37 DIRECTION MODE selector
38 TAPE DUBBING HIGH SPEED button
39 CD SYNCHRO (CD synchronized recording) button
40 DOLBY NR selector
41 AMS (Automatic Music Sensor)/BLANK SKIP button

SECTION 2
ADJUSTMENTS

2-1. MECHANICAL ADJUSTMENTS

PRECAUTION

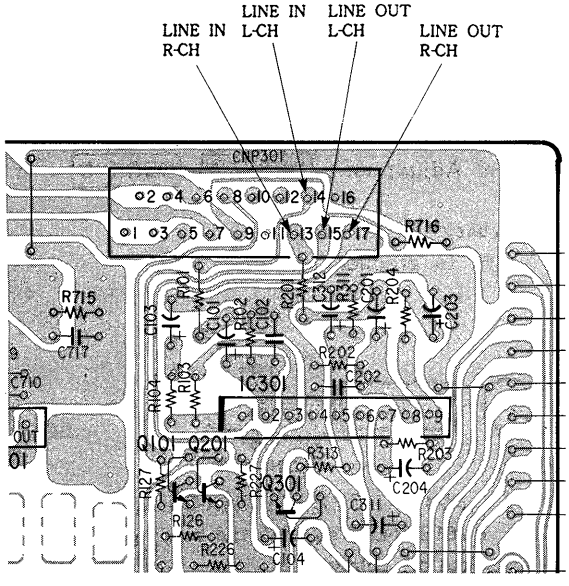
1. Clean the following parts with a denatured-alcohol-moistened swab :
   record/playback head　　pinch roller
   erase head　　rubber belts
   capstan　　idler
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the perts adjusted.

Torque Measurement

Torque	Torque Meter	Meter Reading
FWD	CQ-102C	30 to 60g•cm (0.416 to 0.833 oz•inch)
FWD Back tension	CQ-102C	1 to 5g•cm (0.014 to 0.069 oz•inch)
REV	CQ-102RC	30 to 60g•cm (0.416 to 0.833 oz•inch)
REV Back Tension	CQ-102RC	1 to 5g•cm (0.014 to 0.069 oz•inch)
FF, REW	CQ-201B	100 to 170g•cm (1.39 to 2.36 oz•inch)

• Location of LINE IN/OUT

AUDIO Board (A) CNP301



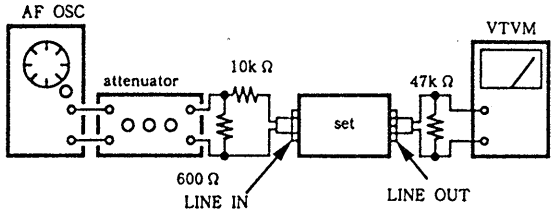
2-2. ELECTRICAL ADJUSTMENTS

Note :The adjustment should be performed in the order given in the service manual.
The adjustments should be performed for both L-CH and R-CH.

• Switches and controls should be set as follows unless otherwise specified.
DOLBY NR switch　　: OFF

• Standard Record :
Deliver the standard input signal level to the input jack and set the REC LEVEL control to obtain the standard output signal level.

−Record Mode−



Standard Input Level

INPUT terminal	LINE IN
source impedance	10kΩ
input level	0.31V (−8dB)

Standard Output Level

OUTPUT terminal	LINE OUT
load impedance	47kΩ
output level	0.25V (−10dB)

• Test tape

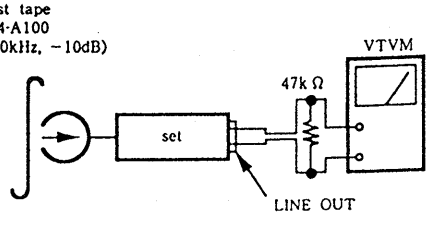
Type	Signal	Used for
P-4-A100	10kHz, −10dB	Azimuth Adjustment
P-4-L300	315Hz, 0dB	PB LEVEL Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

Record/Playback Head Azimuth Adjustment

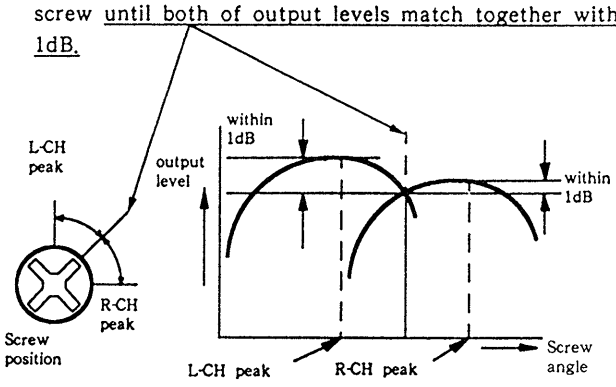
DECK A　DECK B

Procedure :

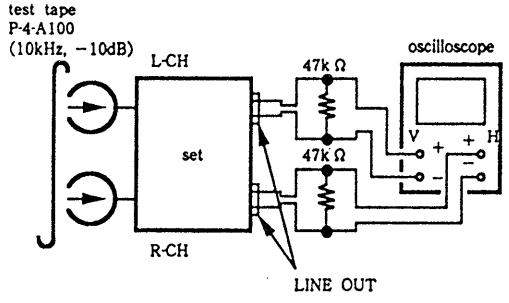
1. Mode : FWD playback

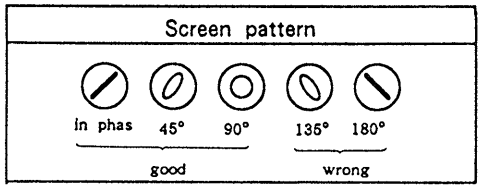


2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1dB.



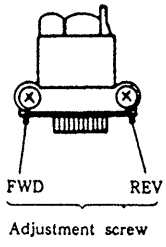
3. Phase Check
   Mode : playback

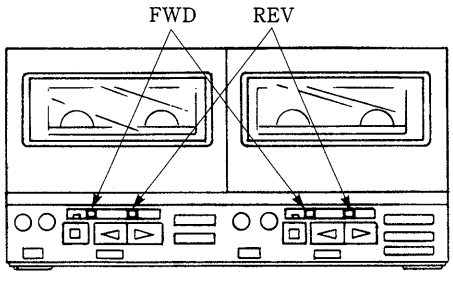




4. Set in the REV mode and repect the step 1-3.
5. After the adjustment, lock the screws with locking compound.

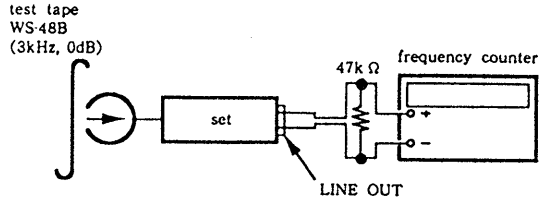
Adjustment Location : Record/Playback head
(Adjustable without disassembly.)





Tape Speed Adjustment DECK A DECK B

Procedure :
Mode : FWD playback



Perform high speed adjustment before normal speed adjustment.
Connect TP1 to ground with jumper wire and continue to press HIGH SPEED DUBING switch : High speed playback.
After the high speed adjustment, remove jumper wire of TP1.
Play back the test tape WS-48B and ajust to meet the specifications below.

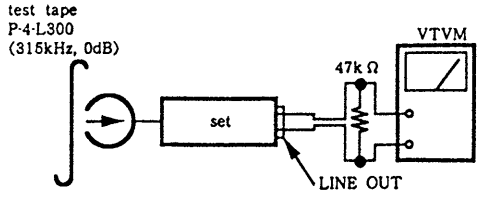
speed	deck	Adjustment Part	variable resistor of motor	S805 High speed dubbing	frequency countor reading
high	A	M11A	(H)	ON	5,960±20Hz
	B	M11B	(H)		
normal	A	M11A	(L)	OFF	2,980±10Hz
	B	M11B	(L)		

Frequency difference between the beginning and the end of the tape should be within 3%.
Frequency difference between deck A and deck B the beginning of the tape should be within 1.5%.

Adjustment Location :
deck A : motor (M11A) rear side
deck B : motor (M11B) rear side

Playback Level Adjustment DECK A DECK B

Procedure :
Mode : playback
Connect TP1 to ground.



Adjust deck A : RV41A(L-CH), RV61A(R-CH) and deck B : RV41B(L-CH) , RV61B(R-CH) so that the reading on VTVM meets the specification below.

LINE OUT level : −10±0.5dB (0.23 to 0.26V)
Level difference between channels : less than 0.5dB
Check that the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

Adjustment Location : MD board

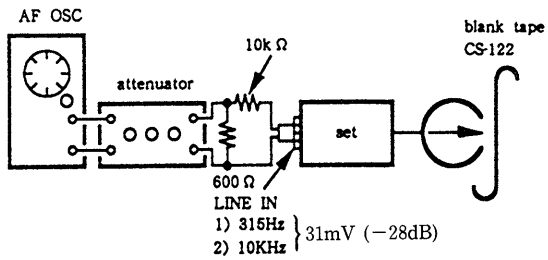
Record Bias Adjustment DECK B

Setting :

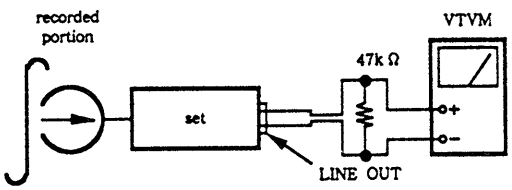
REC LEVEL control : standard record (See page 3.)
Connect TP1 to ground.

Procedure :

1. Mode : record



2. Mode : playback



Confirm that the 10kHz playback output is 0±0.5dB relative to the 315Hz output. If necessary, adjust RV42 (L-CH), RV62 (R-CH) and repeat the steps given above.
After the ajustment remove jumper wire of TP1.

Adjustment Location : MD B board

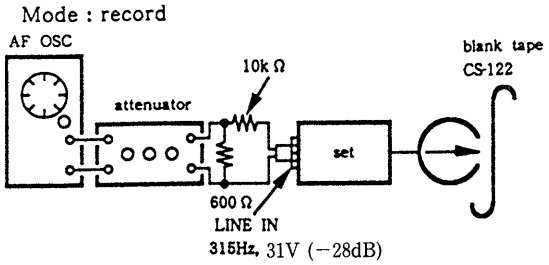
Record Level Adjustment DECK B

Setting :

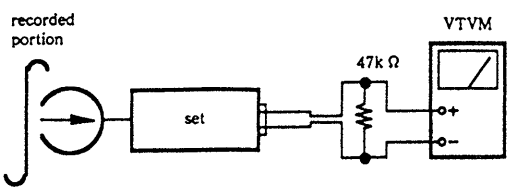
REC LEVEL control : standard record (See page 3.)
Connect TP1 to ground.

Procedure :

1. Mode : record



2. Mode : playback

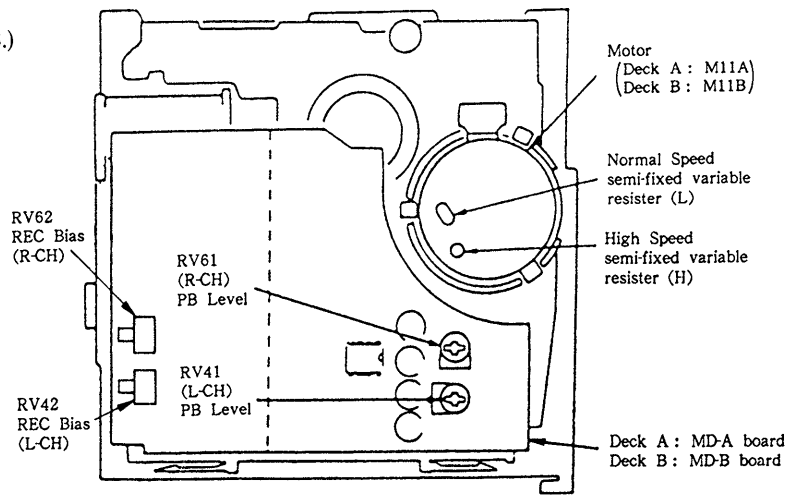


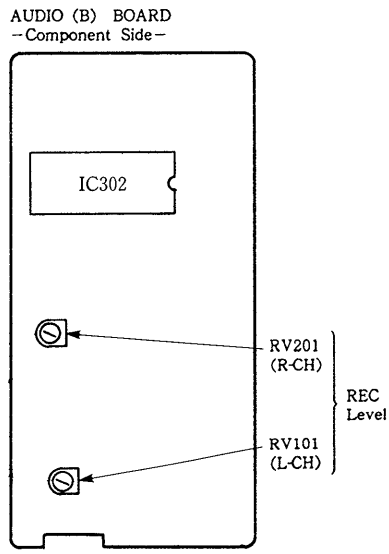
3. Play back the signal recorded in step 1.
   Confirm that the signal level is within the specification below. If necessary, adjust RV101 (L-CH), RV201 (R-CH) and repeat the step1-3.
4. After the adjustment, remove jumper wire of TP1.

LINE OUT level : −30±0.5dB (23 to 26nV)

Adjustment Location : audio (B) board

−Adjusting Parts Location Diagram−





SECTION 3
DIAGRAMS

3-1. IC801 M50964-223SP PIN FUNCTIONS

PIN No.	PIN NAME	I/O	SIGNAL NAME	FUNCTION
1	Vcc		Vcc	POWER 5 ±0.5 V
2	AVSS		AVSS	Analogue system GND
3	VREF	I	VREF	Analogue system reference voltage input
4	D-A	O	D-A	D/A conversion output (Not used : OPEN)
5	PWM	O	PWM	PWM output (Not used : GND)
6	P63	O	$\overline{\text{AMS}}$	AMS LED indication output
7	P62	O	$\overline{\text{A FWD}}$	Deck A FWD LED output
8	P61	O	$\overline{\text{BIAS IV}}$	TYPE IV bias oscillation output
9	P60	O	$\overline{\text{BIAS II}}$	TYPE II bias oscillation output
10	P47	O	$\overline{\text{A REV}}$	Deck A RVS LED output
11	P46	O	$\overline{\text{A REV}}$	Deck A RVS LED output
12	AN5	I	B HALF	Deck B Record prevention claw A, B detection input (Analogue) Voltage (V) / 1 V / 1.9 V / 2.8 V / 3.9 V / 5 V Half / ON / ON / ON / ON / OFF Claw A / OFF / ON / OFF / ON / OFF Claw B / ON / ON / OFF / OFF / OFF
13	AN4	I	KEY3	KEY input
14	AN3	I	KEY2	Voltage (V) / 0 / 0.3 / 0.7 / 1.2 / 1.7 / 2.3 / 2.8 / 3.4 / 4.0 / 4.5 / 5.0 KEY1 / B■ / B▮▮ / B▶ / B◀ / BO / A◀◀ / A▶▶ / / □□ B / □□ C / OFF
15	AN2	I	KEY1	KEY2 / A■ / A▮▮ / A▶ / A◀ / / B◀◀ / B▶▶ / B● / ⟲ / RELAY / OFF KEY3 / AMS / / H DUB / N DUB / / / / / / /
16	P41	O	$\overline{\text{B FWD}}$	Deck B FWD LED output
17	P40	O	$\overline{\text{B REV}}$	Deck B RVS LED output
18	P37	O	$\overline{\text{A FWD}}$	Deck A FWD LED output
19	P36	O	$\overline{\text{B PAUSE}}$	Deck B PAUSE LED output
20	P35	O	$\overline{\text{B REC}}$	Deck B REC LED output
21	P34	O	DOLBY $\overline{\text{B}}$/C	Dolby $\overline{\text{B}}$/C output
22	P33	O	DOLBY $\overline{\text{ON}}$/OFF	Dolby $\overline{\text{ON}}$/OFF output
23	P32	I	SIRCS	SIRCS input or AUDIO BUS reverse input
24	P31	O	$\overline{70}$/120	Playback EQ output for playing deck
25	P30	O	AUB OUT	AUDIO BUS output
26	INTI	I	AUB IN	AUDIO BUS normal input
27	CNVSS		CNVSS	GND
28	$\overline{\text{RESET}}$	I	$\overline{\text{RESET}}$	Microcomputer reset input
29	XIN	I	XIN	Clock input (4 MHz)
30	XO	O	XO	Clock output (4 MHz)
31	Φ	O	Φ	(Not used : OPEN)
32	Vss		Vss	GND
33	P57	I	$\overline{\text{TEST}}$	Electrical adjusting test mode setting
34	P56	I	TYPE IV	TYPE IV switch input
35	P55	I	B70/$\overline{120}$	Deck B TYPE II switch input
36	P54	I	B SHUT	Deck B Reel table signal input
37	P53	I	A70/$\overline{120}$	Deck A TYPE II switch input
38	P52	I	A SHUT	Deck B Reel table signal input
39	P51	I	$\overline{\text{A HALF}}$	Deck A Half switch input

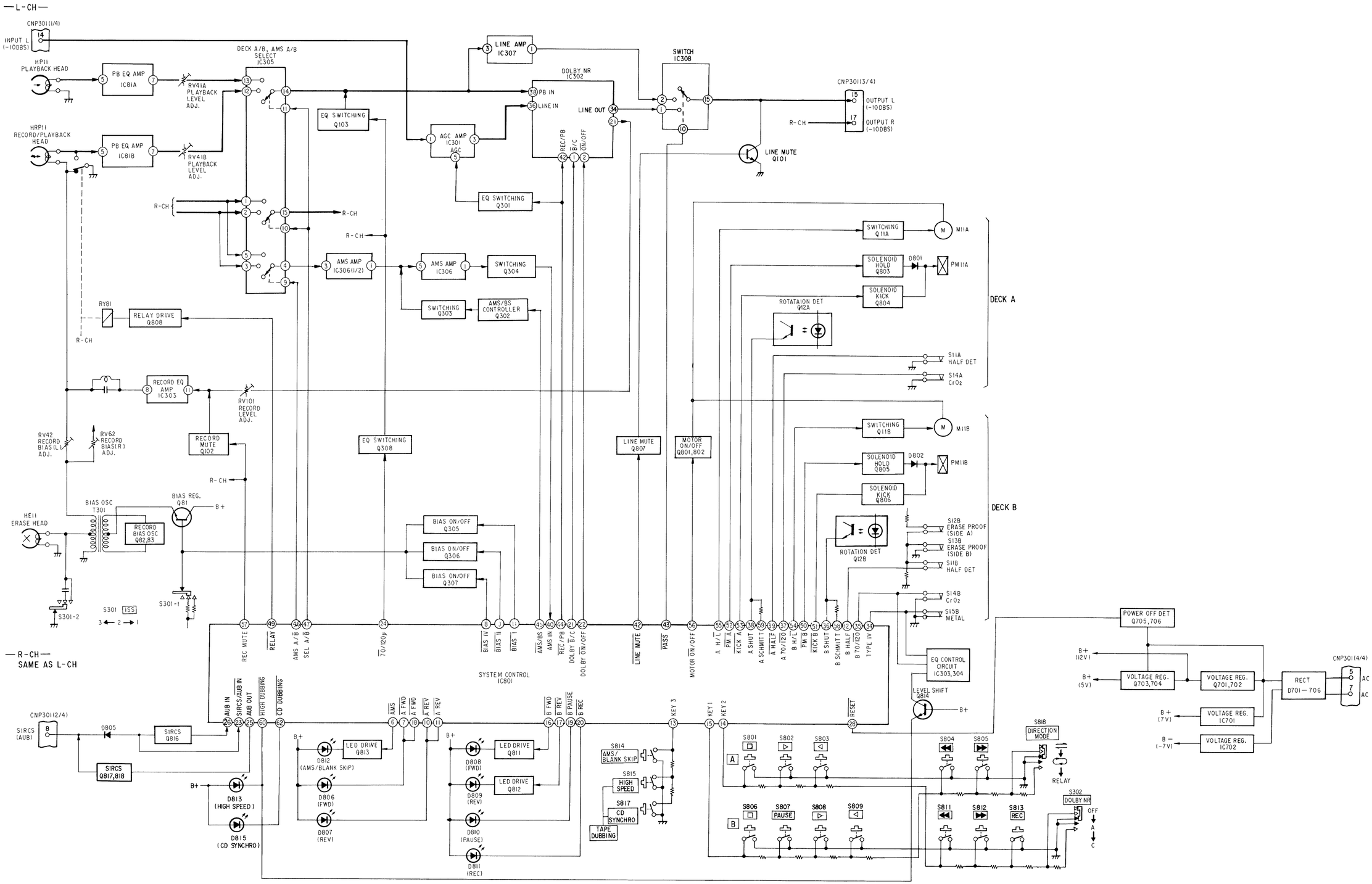
PIN No.	PIN NAME	I/O	SIGNAL NAME	FUNCTION
40	P50	I	AMSIN	AMS signal input
41	P17	O	$\overline{\text{MMUTE}}$	Meter mute output
42	P16	O	$\overline{\text{LMUTE}}$	Line mute output
43	P15	O	$\overline{\text{PASS}}$	PASS AMP change output
44	P14	O	$\overline{\text{REC}}$/PB	Dolby IC REC/PB select output
45	P13	O	$\overline{\text{AMS}}$/BS	AMS AMP characteristics change output
46	P12	O	AMS A/$\overline{\text{B}}$	AMS AMP input Deck A/B select output
47	P11	O	SEL A/$\overline{\text{B}}$	Dolby IC PB input Deck A/B select output
48	P10	O	$\overline{\text{BIAS I}}$	TYPE I bias oscillation output
49	P07	O	$\overline{\text{RELAY}}$	REC/PB change relay output
50	P06	O	$\overline{\text{PM B}}$	Deck B plunger hold output
51	P05	O	$\overline{\text{KICK B}}$	Deck B plunger kick output
52	P04	O	$\overline{\text{PM A}}$	Deck A plunger hold output
53	P03	O	$\overline{\text{KICK A}}$	Deck A plunger kick output
54	P02	O	B H/$\overline{\text{L}}$	Deck B capstan motor speed select
55	P01	O	A H/$\overline{\text{L}}$	Deck A capstan motor speed select
56	P00	O	M $\overline{\text{ON}}$/OFF	Capstan motor $\overline{\text{ON}}$/OFF
57	P27	O	REC MUTE	REC MUTE output
58	P26	O	B SCHMITT	Deck B reel table schmitt output
59	P25	O	A SCHMITT	Deck A reel table schmitt output
60	P24	O	$\overline{\text{HDUB}}$	High Speed Dubbing LED output
61	P23	O	$\overline{\text{NDUB}}$	Normal Speed Dubbing LED output
62	P22	O	$\overline{\text{CD DUB}}$	Auto CD Synchro LED output
63	P21	O	$\overline{\text{A PAUSE}}$	Deck A PAUSE LED output
64	P20	O	$\overline{\text{SIRCS}}$/AUB	SIRCS/AUDIO BUS mode select

[TEST MODE]

When making pin ㉝ low (connect TP1 to ground with jumper wire), following function operates.

1. Source monitor
   Release the line mute while recording.
2. High speed playback
   On recording, while pressing HIGH SPEED (DUBBING) button, high speed playback operates.
3. Record memory stop
   Using DIRECTION MODE switch ⇆, returns to the recording start point and stops or plays.

3-2. BLOCK DIAGRAM



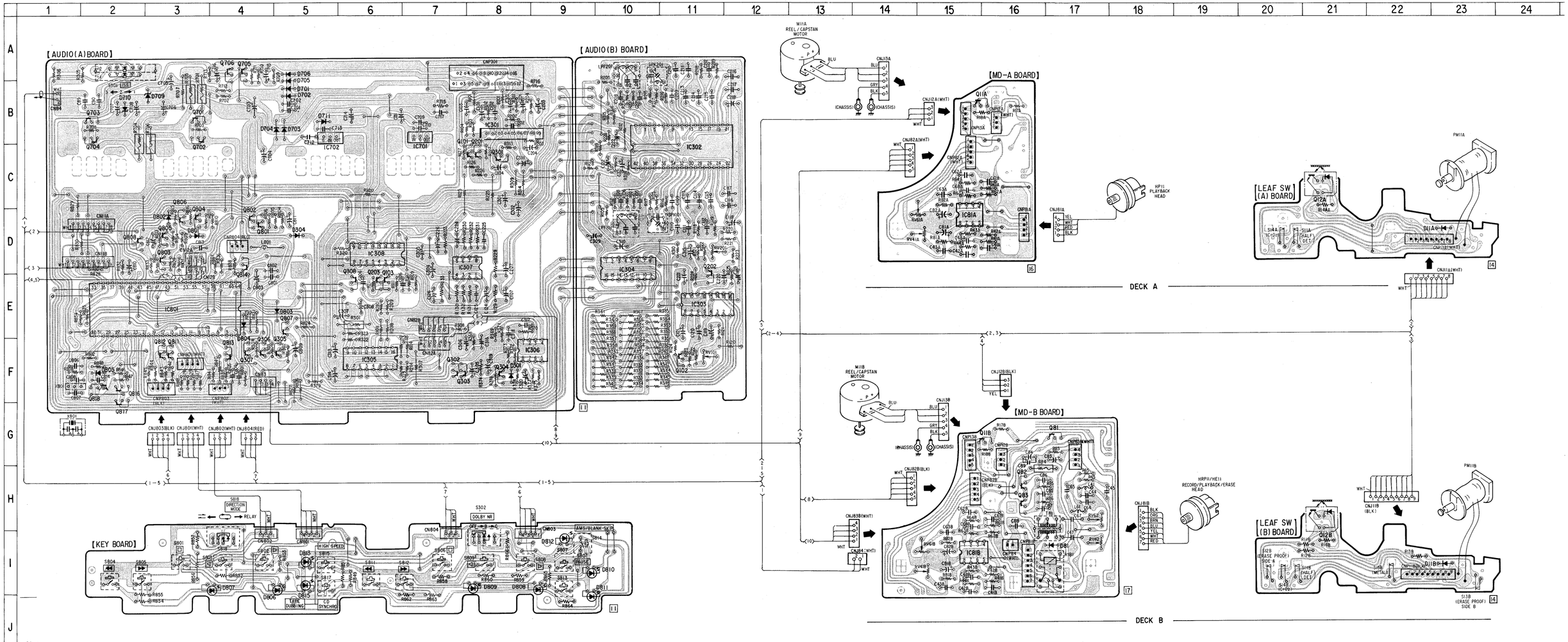
Note on Schematic Diagram:

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- : fusible resistor.

Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : STOP
  ● : REC
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
  : PB (DECK A)
  : PB (DECK B)
  : REC (DECK B)



Note:

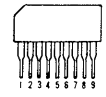
● ○—— : parts extracted from the component side.

• Semiconductor Location

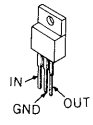
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D11A	D-23	IC81A	D-15	Q302	F-7
D11B	I-11	IC81B	I-15	Q303	F-7
D81	I-17	IC301	B-8	Q304	F-8
D301	F-8	IC302	B-11	Q305	F-5
D304	C-5	IC303	E-11	Q306	F-4
D701	B-5	IC304	D-10	Q307	F-4
D702	B-5	IC305	F-6	Q308	E-6
D703	B-5	IC306	F-8	Q701	B-3
D704	B-5	IC307	D-7	Q702	B-3
D705	A-5	IC308	D-6	Q703	B-2
D706	A-5	IC701	B-7	Q704	B-2
D709	B-3	IC702	B-5	Q705	A-4
D710	B-2	IC801	E-3	Q706	A-4
D711	B-5			Q801	D-4
D801	C-3	Q11A	B-16	Q802	D-4
D802	C-3	Q11B	G-16	Q803	D-3
D803	E-5	Q12A	C-21	Q804	D-3
D804	E-4	Q12B	H-21	Q805	D-3
D805	F-2	Q81	G-17	Q806	D-3
D806	I-4	Q82	H-16	Q807	E-5
D807	I-4	Q83	H-16	Q808	D-2
D808	I-9	Q101	C-7	Q811	F-3
D809	I-8	Q102	F-11	Q812	F-3
D810	I-9	Q103	E-6	Q813	F-4
D811	I-9	Q201	C-8	Q814	D-4
D812	I-9	Q202	D-11	Q816	F-2
D813	I-5	Q203	E-6	Q817	F-2
D815	I-5	Q301	C-8	Q818	F-2

• Semiconductor Lead Layouts

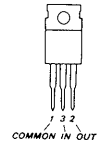
BA3308



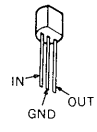
M5F7807



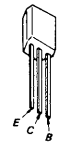
M5F7907



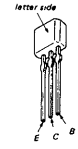
TC4051BPHB



DTA114ES
DTC114ES
DTC143TS
2SC2603-EF

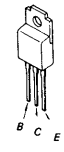


2SA1175-HFE

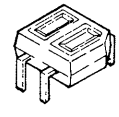


2SB1013-4
2SC2001
2SD1388

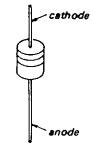
2SD1761-EF



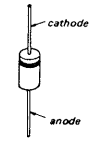
GP-2S09-C



HZS6C3L
1SS120
11EQS04
11ES2

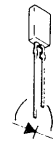


HZ12B2L
1SS132



MPG3877S
SEL3213C-D

SEL4225C-D
SEL4925A-D



SECTION 4
EXPLODED VIEWS

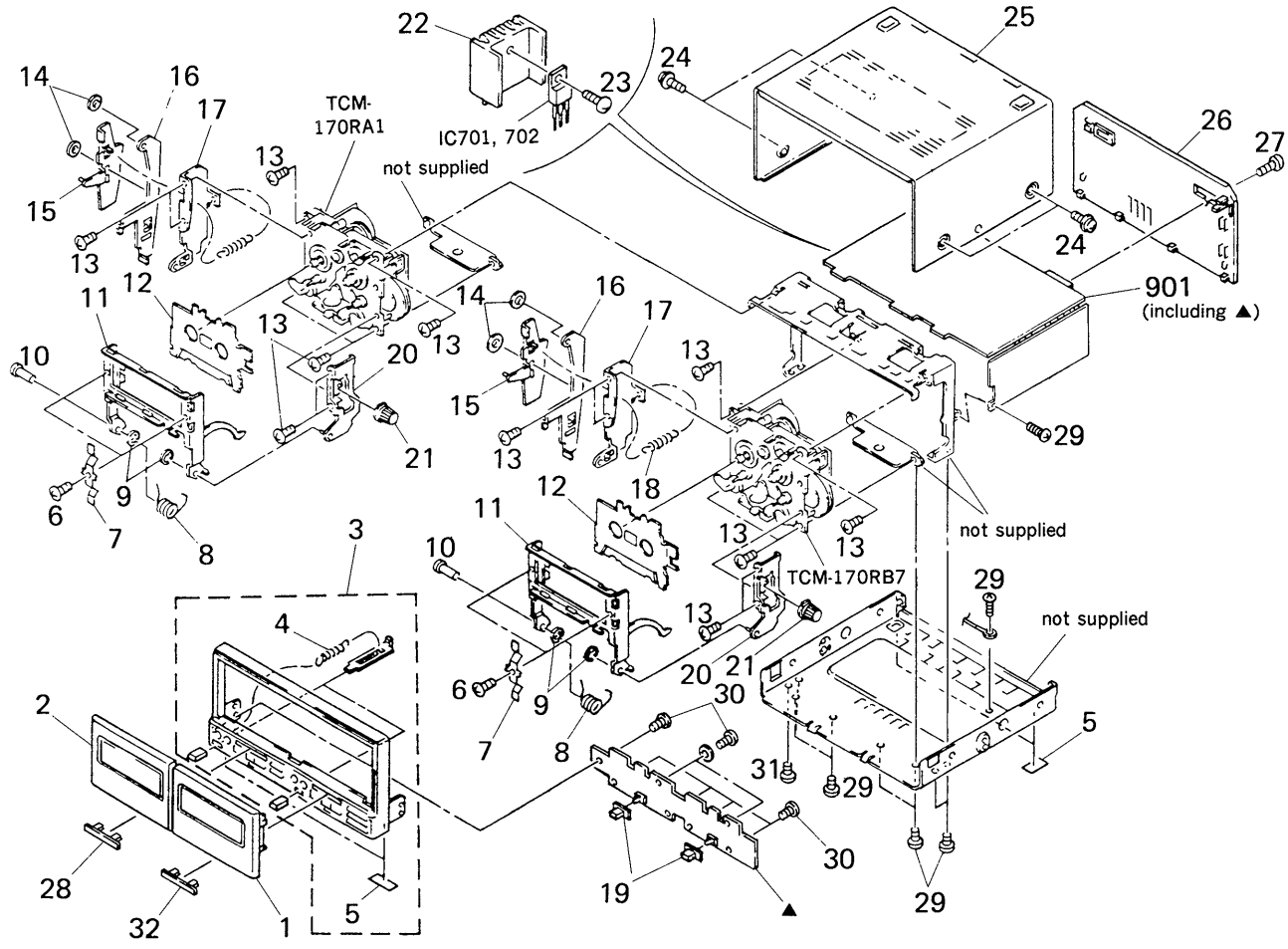
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
  Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ ↑
  Cabinet's Color Parts' Color

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifé.

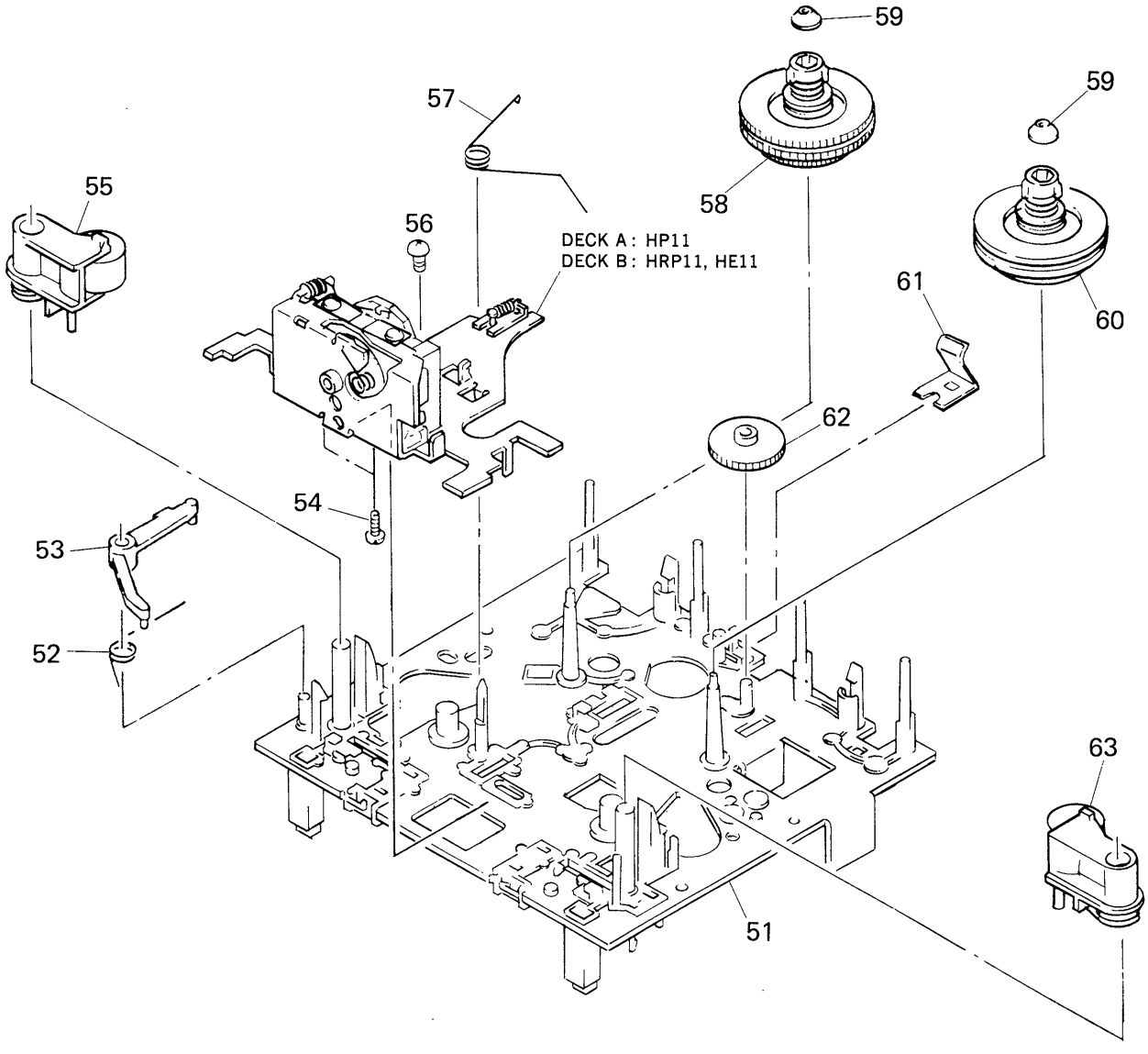
4-1. FRONT PANEL BLOCK



Ref.No	Part No.	Description	Remarks
1	X-3340-199-1	LID (B) ASSY, CASSETTE	
2	X-3340-198-1	LID (A) ASSY, CASSETTE	
3	X-3346-301-1	PANEL ASSY, FRONT	
4	3-567-110-00	SPRING, TENSION	
5	4-930-336-01	FOOT (FELT)	
6	7-621-255-15	SCREW +PTT 2X3 (S)	
7	3-354-908-01	SPRING (CASSETTE RETAINER)	
8	3-346-364-01	SPRING (LOADING), TORSION	
9	7-624-105-04	RETAINING, RING E-2.3	
10	*3-346-334-01	SHAFT (HOLDER FITTING LEFT)	
11	*3-340-150-01	HOLDER, CASSETTE	
12	*3-340-123-01	RETAINER, CASSETTE	
13	7-621-773-86	SCREW +BVTT 2.6X4 (S)	
14	3-558-708-21	WASHER, STOPPER	
15	*X-3332-465-1	LEVER (LOCK) ASSY	
16	*3-340-142-01	LEVER (EJECT)	
17	*X-3332-466-1	BRACKET (L) ASSY	
18	3-343-474-01	SPRING, TENSION	

Ref.No	Part No.	Description	Remarks
19	3-349-054-01	KNOB (SLIDE)	
20	*X-3332-494-1	BRACKET (R) ASSY	
21	X-3340-185-1	GEAR (DAMPER) ASSY	
22	*4-921-402-01	HEAT SINK	
23	7-685-646-79	SCREW BVTP 3X8 TYPE2 IT-3	
24	3-704-366-01	SCREW (CASE) (M3X8)	
25	4-932-841-01	CASE	
26	*3-354-982-01	PANEL, BACK	
27	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
28	3-354-984-01	PLATE (AZIMUTH L), ORNAMENTAL	
29	7-682-547-04	SCREW +BVTT 3X6 (S)	
30	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
31	7-685-870-01	SCREW +BVTT 3X5 (S)	
32	3-354-985-01	PLATE (AZIMUTH R), ORNAMENTAL	
901	*A-2006-231-A	MOUNTED PCB, AUDIO	
IC701	8-759-604-86	IC M5F7807	
IC702	8-759-604-90	IC M5F7907	

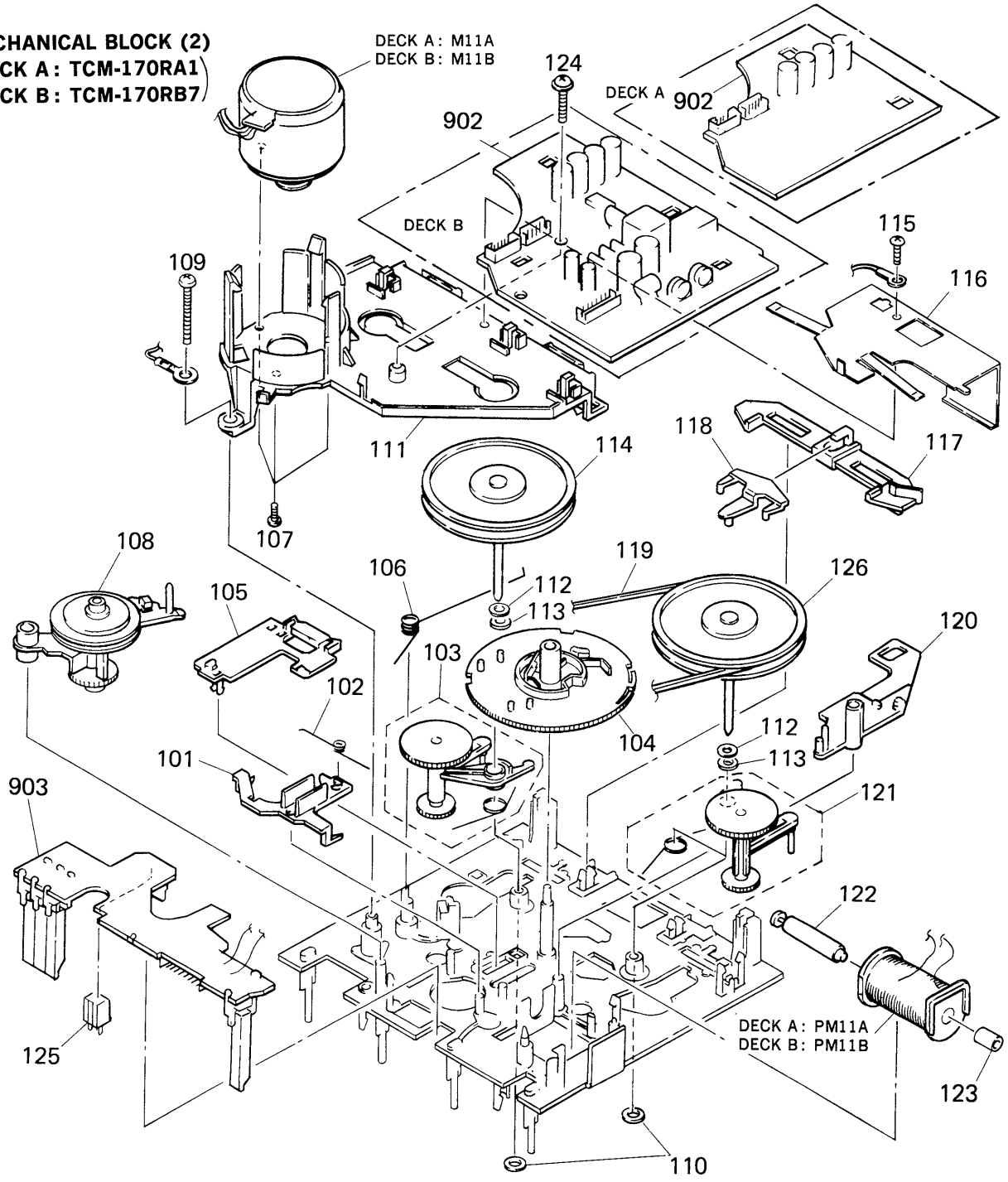
4-2. MECHANICAL BLOCK (1)
(DECK A : TCM-170RA1)
(DECK B : TCM-170RB7)



Ref.No	Part No.	Description	Remarks
51	X-3343-439-1	CHASSIS ASSY, MECHANICAL	
52	3-343-477-01	SPRING, TORSION (EJECT SAFTY)	
53	3-343-476-01	LEVER (EJECT SAFETY LEVER)	
54	7-685-102-19	SCREW +P 2X4 NON-SLIT TYPE 2	
55	X-3343-456-1	LEVER (PINCH R) ASSY	
56	7-621-773-86	SCREW +BVTT 2.6X4 (S)	
57	3-343-401-01	SPRING, TORSION	
58	X-3343-415-1	TABEL (REV) ASSY, REEL	

Ref.No	Part No.	Description	Remarks
59	3-343-439-01	CAP (REEL TABLE)	
60	X-3343-401-1	TABEL ASSY, REEL	
61	3-343-420-01	SPRING, LEAF	
62	3-343-411-01	GEAR (FF GEAR)	
63	X-3343-455-1	LEVER (PINCH F) ASSY	
HP11	A-2003-503-A	(DECK A)....PC BOARD ASSY, HEAD	
HRP11	A-2003-504-A	(DECK B)....CHASSIS ASSY, HEAD	

4-3. MECHANICAL BLOCK (2)
(DECK A : TCM-170RA1)
(DECK B : TCM-170RB7)



Ref.No	Part No.	Description	Remarks
101	3-343-453-01	SLIDER (BRAKE PLATE)	
102	3-343-429-01	SPRING, TORSION	
103	X-3343-454-1	LEVER (TU-R) ASSY	
104	3-343-470-01	GEAR (CAM GEAR)	
105	3-343-461-01	SLIDER	
106	3-343-430-01	SPRING, TORSION	
107	7-627-556-28	SCREW +P 2.6X3.5	
108	X-3343-414-1	LAVER (FR ARM) ASSY	
109	3-355-801-01	SCREW (BTP 2X18)	
110	3-343-473-01	WASHER, NYLON	
111	*X-3343-407-1	BASE (THRUST RETAINER) ASSY	
112	4-605-835-11	WASHER (2.6), POLYSLIDER	
113	3-307-482-00	WASHER, LUMILER	
114	X-3343-411-6	FLYWHEEL COMPLETE ASSY	
115	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT	
116	3-343-480-01	PLATE, SHIELD	
117	3-343-457-01	SLIDER (REVERSE SLIDER)	

Ref.No	Part No.	Description	Remarks
118	3-343-462-01	LEVER	
119	3-313-816-02	BELT (CAPSTAN BELT SQUARE)	
120	3-343-493-01	LEVER (PM LEVER)	
121	X-3343-453-1	LEVER (TU-F) ASSY	
122	*3-343-425-01	ARBOR(MOVABLE IRON ARBOR),IRON	
123	*3-343-424-01	ARBOR (FIXED IRON ARBOR), IRON	
124	3-343-404-01	SCREW (PTPWH 2X12)	
125	3-343-419-01	HOLDER (S SENSER A)	
126	X-3343-416-7	FLYWHEEL (REV) COMPLETE ASSY	
902	*1-624-146-11	(DESK B)....PC BOARD,MD-B	
902	*1-624-147-11	(DECK A)....PC BOARD, MD-A	
903	*1-624-148-11	PC BOARD, LEAF SW	
M11A	X-3343-447-1	(DECK A)....MOTOR ASSY	
M11B	X-3343-447-1	(DECK B)....MOTOR ASSY	
PM11A	1-454-456-11	(DECK A)....SOLENOID, PLUNGER	
PM11B	1-454-456-11	(DECK B)....SOLENOID, PLUNGER	

SECTION 5
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC, UPD...: μPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No	Part No.	Description			
901	*A-2006-231-A	MOUNTED PCB, AUDIO			
902	*1-624-146-11	(DESK B)....PC BOARD,MD-B			
902	*1-624-147-11	(DECK A)....PC BOARD, MD-A			
903	*1-624-148-11	PC BOARD, LEAF SW			
		CAPACITOR			
C41A	1-162-289-31	CERAMIC	390PF	10%	50V
C41B	1-162-289-31	CERAMIC	390PF	10%	50V
C42A	1-136-157-00	FILM	0.022MF	5%	50V
C42B	1-136-157-00	FILM	0.022MF	5%	50V
C43A	1-124-282-00	ELECT	22MF	20%	25V
C43B	1-124-282-00	ELECT	22MF	20%	25V
C44	1-162-288-31	CERAMIC	330PF	10%	50V
C45	1-136-273-91	FILM	75PF	5%	630V
C47	1-162-209-31	CERAMIC	27PF	5%	50V
C48A	1-162-217-31	CERAMIC	56PF	5%	50V
C48B	1-162-217-31	CERAMIC	56PF	5%	50V
C61A	1-162-289-31	CERAMIC	390PF	10%	50V
C61B	1-162-289-31	CERAMIC	390PF	10%	50V
C62A	1-136-157-00	FILM	0.022MF	5%	50V
C62B	1-136-157-00	FILM	0.022MF	5%	50V
C63A	1-124-282-00	ELECT	22MF	20%	25V
C63B	1-124-282-00	ELECT	22MF	20%	25V
C64	1-162-288-31	CERAMIC	330PF	10%	50V
C65	1-136-273-91	FILM	75PF	5%	630V
C67	1-162-209-31	CERAMIC	27PF	5%	50V
C68A	1-162-217-31	CERAMIC	56PF	5%	50V
C68B	1-162-217-31	CERAMIC	56PF	5%	50V
C81A	1-126-101-11	ELECT	100MF	20%	16V
C81B	1-126-101-11	ELECT	100MF	20%	16V
C82A	1-126-101-11	ELECT	100MF	20%	16V
C82B	1-126-101-11	ELECT	100MF	20%	16V
C83	1-124-791-11	ELECT	1MF	20%	50V
C84	1-124-925-11	ELECT	2.2MF	20%	50V
C85	1-130-480-00	MYLAR	0.0056MF	5%	50V
C86	1-130-476-00	MYLAR	0.0027MF	5%	50V
C87	1-130-476-00	MYLAR	0.0027MF	5%	50V
C88	1-136-562-11	FILM	0.0082MF	5%	630V
C89	1-136-554-11	FILM	0.0018MF	5%	630V
C89	1-161-494-00	CERAMIC	0.022MF		25V
C90	1-136-553-11	FILM	0.0015MF	5%	630V
C101	1-124-925-11	ELECT	2.2MF	20%	50V
C102	1-162-294-31	CERAMIC	0.001MF	10%	50V
C103	1-124-443-00	ELECT	100MF	20%	10V
C104	1-123-875-11	ELECT	10MF	20%	50V
C105	1-161-375-00	CERAMIC	0.0022MF	20%	16V
C106	1-136-162-00	FILM	0.056MF	5%	50V
C107	1-123-875-11	ELECT	10MF	20%	50V
C108	1-161-375-00	CERAMIC	0.0022MF	20%	16V
C109	1-130-479-00	MYLAR	0.0047MF	5%	50V
C110	1-136-173-00	FILM	0.47MF	5%	50V
C111	1-136-167-00	FILM	0.15MF	5%	50V
C112	1-136-155-00	FILM	0.015MF	5%	50V
C113	1-136-169-00	FILM	0.22MF	5%	50V
C114	1-136-163-00	FILM	0.068MF	5%	50V
C115	1-136-161-00	FILM	0.047MF	5%	50V
C116	1-130-481-00	MYLAR	0.0068MF	5%	50V
C117	1-136-153-00	FILM	0.01MF	5%	50V
C118	1-124-927-11	ELECT	4.7MF	20%	50V
C119	1-124-464-11	ELECT	0.22MF	20%	50V
C120	1-124-927-11	ELECT	4.7MF	20%	50V
C121	1-123-875-11	ELECT	10MF	20%	50V
C122	1-126-233-11	ELECT	22MF	20%	50V
C124	1-123-875-11	ELECT	10MF	20%	50V
C125	1-162-217-31	CERAMIC	56PF	5%	50V
C126	1-126-233-11	ELECT	22MF	20%	50V
C201	1-124-925-11	ELECT	2.2MF	20%	50V
C202	1-162-294-31	CERAMIC	0.001MF	10%	50V
C203	1-124-443-00	ELECT	100MF	20%	10V
C204	1-123-875-11	ELECT	10MF	20%	50V
C205	1-161-375-00	CERAMIC	0.0022MF	20%	16V
C206	1-136-162-00	FILM	0.056MF	5%	50V
C207	1-123-875-11	ELECT	10MF	20%	50V
C208	1-161-375-00	CERAMIC	0.0022MF	20%	16V
C209	1-130-479-00	MYLAR	0.0047MF	5%	50V
C210	1-136-173-00	FILM	0.47MF	5%	50V
C211	1-136-167-00	FILM	0.15MF	5%	50V
C212	1-136-155-00	FILM	0.015MF	5%	50V
C213	1-136-169-00	FILM	0.22MF	5%	50V
C214	1-136-163-00	FILM	0.068MF	5%	50V
C215	1-136-161-00	FILM	0.047MF	5%	50V
C216	1-130-481-00	MYLAR	0.0068MF	5%	50V
C217	1-136-153-00	FILM	0.01MF	5%	50V
C218	1-124-927-11	ELECT	4.7MF	20%	50V
C219	1-124-464-11	ELECT	0.22MF	20%	50V
C220	1-124-927-11	ELECT	4.7MF	20%	50V
C221	1-123-875-11	ELECT	10MF	20%	50V
C222	1-126-233-11	ELECT	22MF	20%	50V
C224	1-123-875-11	ELECT	10MF	20%	50V
C225	1-162-217-31	CERAMIC	56PF	5%	50V
C226	1-126-233-11	ELECT	22MF	20%	50V
C301	1-123-875-11	ELECT	10MF	20%	50V
C302	1-123-875-11	ELECT	10MF	20%	50V
C303	1-123-875-11	ELECT	10MF	20%	50V
C304	1-123-875-11	ELECT	10MF	20%	50V
C305	1-124-477-11	ELECT	47MF	20%	25V
C306	1-124-477-11	ELECT	47MF	20%	25V
C307	1-124-120-11	ELECT	220MF	20%	16V
C308	1-124-120-11	ELECT	220MF	20%	16V
C309	1-123-875-11	ELECT	10MF	20%	50V
C310	1-123-875-11	ELECT	10MF	20%	50V
C311	1-124-443-00	ELECT	100MF	20%	10V
C312	1-126-233-11	ELECT	22MF	20%	50V
C313	1-123-875-11	ELECT	10MF	20%	50V
C314	1-123-875-11	ELECT	10MF	20%	50V
C315	1-124-791-11	ELECT	1MF	20%	50V
C316	1-124-902-00	ELECT	0.47MF	20%	50V
C317	1-162-217-31	CERAMIC	56PF	5%	50V
C318	1-136-157-00	FILM	0.022MF	5%	50V
C319	1-124-925-11	ELECT	2.2MF	20%	50V

REVISED

Ref.No	Part No.	Description			
C320	1-124-925-11	ELECT	2.2MF	20%	50V
C321	1-124-927-11	ELECT	4.7MF	20%	50V
C701	1-164-159-11	CERAMIC	0.1MF		50V
C702	1-164-159-11	CERAMIC	0.1MF		50V
C703	1-124-563-11	ELECT	2200MF	20%	25V
C704	1-124-480-11	ELECT	470MF	20%	25V
C705	1-124-120-11	ELECT	220MF	20%	16V
C706	1-124-360-00	ELECT	1000MF	20%	16V
C707	1-124-477-11	ELECT	47MF	20%	25V
C708	1-124-472-11	ELECT	470MF	20%	10V
C709	1-164-159-11	CERAMIC	0.1MF		50V
C710	1-164-159-11	CERAMIC	0.1MF		50V
C711	1-124-472-11	ELECT	470MF	20%	10V
C712	1-164-159-11	CERAMIC	0.1MF		50V
C713	1-164-159-11	CERAMIC	0.1MF		50V
C714	1-124-472-11	ELECT	470MF	20%	10V
C715	1-124-791-11	ELECT	1MF	20%	50V
C716	1-124-482-11	ELECT	33MF	20%	25V
C717	1-162-294-31	CERAMIC	0.001MF	10%	50V
C801	1-161-494-00	CERAMIC	0.022MF		25V
C802	1-161-494-00	CERAMIC	0.022MF		25V
C803	1-124-443-00	ELECT	100MF	20%	10V
C804	1-161-494-00	CERAMIC	0.022MF		25V
C805	1-161-494-00	CERAMIC	0.022MF		25V
C806	1-162-199-31	CERAMIC	10PF	5%	50V
C807	1-162-199-31	CERAMIC	10PF	5%	50V
C808	1-162-199-31	CERAMIC	10PF	5%	50V
C809	1-126-176-11	ELECT	220MF	20%	10V
C810	1-124-925-11	ELECT	2.2MF	20%	50V
C811	1-124-927-11	ELECT	4.7MF	20%	50V
C812	1-124-925-11	ELECT	2.2MF	20%	50V
C813	1-164-159-11	CERAMIC	0.1MF		50V
C814	1-162-199-31	CERAMIC	10PF	5%	50V
CN84	*1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
CNP11A	1-564-501-11	PIN, CONNECTOR 8P			
CNP11B	1-506-615-11	PIN, CONNECTOR 9P			
CNP12A	*1-564-337-00	PIN, CONNECTOR 3P			
CNP12B	*1-564-337-61	PIN, CONNECTOR 3P			
CNP13A	*1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P			
CNP13B	*1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P			
CNP81A	*1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P			
CNP81B	*1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P			
CNP82A	*1-564-339-00	PIN, CONNECTOR 5P			
CNP82B	*1-564-339-61	PIN, CONNECTOR 5P			
CNP83	*1-564-338-61	PIN, CONNECTOR 4P			
CNP84	*1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
CNP301	*1-569-624-11	SOCKET, CONNECTOR 17P			
CNP801	*1-564-338-00	PIN, CONNECTOR 4P			
CNP802	*1-564-337-00	PIN, CONNECTOR 3P			
CNP803	*1-564-338-61	PIN, CONNECTOR 4P			
CNP804	*1-564-337-71	PIN, CONNECTOR 3P			
D11A	8-719-107-94	DIODE 1SS132			
D11B	8-719-107-94	DIODE 1SS132			
D81	8-719-107-94	DIODE 1SS132			
D301	8-719-912-20	DIODE 1SS120			
D304	8-719-912-20	DIODE 1SS120			
D701	8-719-200-82	DIODE 11ES2			
D702	8-719-200-82	DIODE 11ES2			
D703	8-719-200-82	DIODE 11ES2			
D704	8-719-200-82	DIODE 11ES2			
D705	8-719-912-20	DIODE 1SS120			
D706	8-719-912-20	DIODE 1SS120			
D709	8-719-910-25	DIODE HZ12B2L			
D710	8-719-933-41	DIODE HZS6C3L			

Ref.No	Part No.	Description
D711	8-719-210-21	DIODE 11EQS04
D801	8-719-200-82	DIODE 11ES2
D802	8-719-200-82	DIODE 11ES2
D803	8-719-200-82	DIODE 11ES2
D804	8-719-912-20	DIODE 1SS120
D805	8-719-912-20	DIODE 1SS120
D806	8-719-942-15	DIODE MPG3877S
D807	8-719-942-15	DIODE MPG3877S
D808	8-719-942-15	DIODE MPG3877S
D809	8-719-942-15	DIODE MPG3877S
D810	8-719-310-04	DIODE SEL4925A-D
D811	8-719-312-38	DIODE SEL4225C-D
D812	8-719-942-15	DIODE MPG3877S
D813	8-719-311-05	DIODE SEL3213C-D
D815	8-719-311-05	DIODE SEL3213C-D
HP11	A-2003-503-A	(DECK A)....PC BOARD ASSY, HEAD
HRP11	A-2003-504-A	(DECK B)....CHASSIS ASSY, HEAD
IC81A	8-759-111-44	IC UPC4570C-1
IC81B	8-759-111-44	IC UPC4570C-1
IC301	8-759-939-73	IC BA3308
IC302	8-752-018-70	IC CX20187
IC303	8-752-033-61	IC CXA1198AP
IC304	8-759-208-06	IC TC4051BPHB
IC305	8-759-040-53	IC MC14053BCP
IC306	8-759-945-58	IC RC4558P
IC307	8-759-945-58	IC RC4558P
IC308	8-759-040-53	IC MC14053BCP
IC701	8-759-604-86	IC M5F7807
IC702	8-759-604-90	IC M5F7907
IC801	8-759-635-01	IC M50964-223SP
L41	1-410-780-11	INDUCTOR 27MMH
L61	1-410-780-11	INDUCTOR 27MMH
L801	1-408-080-00	INDUCTOR 100UH
LPF101	1-236-087-11	FILTER, LOW PASS
LPF201	1-236-087-11	FILTER, LOW PASS
M11A	X-3343-447-1	(DECK A)....MOTOR ASSY
M11B	X-3343-447-1	(DECK B)....MOTOR ASSY
PM11A	1-454-456-11	(DECK A)....SOLENOID, PLUNGER
PM11B	1-454-456-11	(DECK B)....SOLENOID, PLUNGER
Q11A	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q11B	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q12A	8-719-939-23	PHOTO TRANSISTOR GP2S09-C
Q12B	8-719-939-23	PHOTO TRANSISTOR GP2S09-C
Q81	8-729-111-29	TRANSISTOR 2SD1616A-K
Q82	8-729-100-13	TRANSISTOR 2SC2001
Q83	8-729-100-13	TRANSISTOR 2SC2001
Q101	8-729-900-74	TRANSISTOR DTC143TS
Q102	8-729-620-05	TRANSISTOR 2SC2603-EF
Q103	8-729-900-74	TRANSISTOR DTC143TS
Q201	8-729-900-74	TRANSISTOR DTC143TS
Q202	8-729-620-05	TRANSISTOR 2SC2603-EF
Q203	8-729-900-74	TRANSISTOR DTC143TS
Q301	8-729-900-80	TRANSISTOR DTC114ES
Q302	8-729-900-61	TRANSISTOR DTA114ES
Q303	8-729-900-74	TRANSISTOR DTC143TS
Q304	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q305	8-729-900-61	TRANSISTOR DTA114ES
Q306	8-729-900-61	TRANSISTOR DTA114ES
Q307	8-729-900-61	TRANSISTOR DTA114ES
Q308	8-729-900-61	TRANSISTOR DTA114ES
Q701	8-729-620-05	TRANSISTOR 2SC2603-EF
Q702	8-729-920-98	TRANSISTOR 2SD1761-EF

Ref.No	Part No.	Description
Q703	8-729-620-05	TRANSISTOR 2SC2603-EF
Q704	8-729-920-98	TRANSISTOR 2SD1761-EF
Q705	8-729-620-05	TRANSISTOR 2SC2603-EF
Q706	8-729-620-05	TRANSISTOR 2SC2603-EF
Q801	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q802	8-729-801-84	TRANSISTOR 2SB1013-4
Q803	8-729-801-84	TRANSISTOR 2SB1013-4
Q804	8-729-801-84	TRANSISTOR 2SB1013-4
Q805	8-729-801-84	TRANSISTOR 2SB1013-4
Q806	8-729-801-84	TRANSISTOR 2SB1013-4
Q807	8-729-900-61	TRANSISTOR DTA114ES
Q808	8-729-900-61	TRANSISTOR DTA114ES
Q811	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q812	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q813	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q814	8-729-900-80	TRANSISTOR DTC114ES
Q816	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q817	8-729-900-61	TRANSISTOR DTA114ES
Q818	8-729-900-80	TRANSISTOR DTC114ES

RESISTOR

Ref.No	Part No.	Description				
R11B	1-247-834-11	CARBON	1.3K	5%	1/4W	
R12B	1-249-414-11	CARBON	560	5%	1/4W	
R13B	1-247-818-11	CARBON	300	5%	1/4W	
R14A	1-249-408-11	CARBON	180	5%	1/4W	
R14B	1-249-408-11	CARBON	180	5%	1/4W	
R17A	1-249-437-11	CARBON	47K	5%	1/4W	
R17B	1-249-437-11	CARBON	47K	5%	1/4W	
R18A	1-249-437-11	CARBON	47K	5%	1/4W	
R18B	1-249-437-11	CARBON	47K	5%	1/4W	
R41A	1-247-881-00	CARBON	120K	5%	1/4W	
R41B	1-247-881-00	CARBON	120K	5%	1/4W	
R42A	1-249-405-11	CARBON	100	5%	1/4W	
R42B	1-249-405-11	CARBON	100	5%	1/4W	
R43A	1-247-882-11	CARBON	130K	5%	1/4W	
R43B	1-247-882-11	CARBON	130K	5%	1/4W	
R44A	1-249-426-11	CARBON	5.6K	5%	1/4W	
R44B	1-249-426-11	CARBON	5.6K	5%	1/4W	
R45	1-249-430-11	CARBON	12K	5%	1/4W	
R61A	1-247-881-00	CARBON	120K	5%	1/4W	
R61B	1-247-881-00	CARBON	120K	5%	1/4W	
R62A	1-249-405-11	CARBON	100	5%	1/4W	
R62B	1-249-405-11	CARBON	100	5%	1/4W	
R63A	1-247-882-11	CARBON	130K	5%	1/4W	
R63B	1-247-882-11	CARBON	130K	5%	1/4W	
R64A	1-249-426-11	CARBON	5.6K	5%	1/4W	
R64B	1-249-426-11	CARBON	5.6K	5%	1/4W	
R65	1-249-430-11	CARBON	12K	5%	1/4W	
R81A	1-249-409-11	CARBON	220	5%	1/4W	
R81B	1-249-409-11	CARBON	220	5%	1/4W	
R82A	1-249-409-11	CARBON	220	5%	1/4W	
R82B	1-249-409-11	CARBON	220	5%	1/4W	
R83	1-249-429-11	CARBON	10K	5%	1/4W	
R84	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R85	1-249-435-11	CARBON	33K	5%	1/4W	
R86	1-249-435-11	CARBON	33K	5%	1/4W	
R101	1-247-866-11	CARBON	30K	5%	1/4W	
R102	1-249-417-11	CARBON	1K	5%	1/4W	
R103	1-249-437-11	CARBON	47K	5%	1/4W	
R104	1-249-417-11	CARBON	1K	5%	1/4W	
R105	1-249-423-11	CARBON	3.3K	5%	1/4W	
R106	1-249-426-11	CARBON	5.6K	5%	1/4W	
R107	1-247-834-11	CARBON	1.3K	5%	1/4W	
R108	1-249-418-11	CARBON	1.2K	5%	1/4W	
R109	1-249-423-11	CARBON	3.3K	5%	1/4W	
R110	1-247-834-11	CARBON	1.3K	5%	1/4W	

Ref.No	Part No.	Description				
R111	1-247-887-00	CARBON	220K	5%	1/4W	
R112	1-249-417-11	CARBON	1K	5%	1/4W	
R113	1-249-441-11	CARBON	100K	5%	1/4W	
R114	1-249-441-11	CARBON	100K	5%	1/4W	
R115	1-249-424-11	CARBON	3.9K	5%	1/4W	
R116	1-247-842-11	CARBON	3K	5%	1/4W	
R117	1-247-822-11	CARBON	430	5%	1/4W	
R118	1-249-427-11	CARBON	6.8K	5%	1/4W	
R119	1-249-415-11	CARBON	680	5%	1/4W	
R120	1-249-429-11	CARBON	10K	5%	1/4W	
R121	1-249-428-11	CARBON	8.2K	5%	1/4W	
R122	1-249-421-11	CARBON	2.2K	5%	1/4W	
R123	1-249-429-11	CARBON	10K	5%	1/4W	
R124	1-249-417-11	CARBON	1K	5%	1/4W	
R125	1-249-420-11	CARBON	1.8K	5%	1/4W	
R126	1-247-842-11	CARBON	3K	5%	1/4W	
R127	1-249-411-11	CARBON	330	5%	1/4W	
R128	1-249-441-11	CARBON	100K	5%	1/4W	
R129	1-249-417-11	CARBON	1K	5%	1/4W	
R130	1-249-441-11	CARBON	100K	5%	1/4W	
R131	1-249-436-11	CARBON	39K	5%	1/4W	
R132	1-249-420-11	CARBON	1.8K	5%	1/4W	
R133	1-249-441-11	CARBON	100K	5%	1/4W	
R201	1-247-866-11	CARBON	30K	5%	1/4W	
R202	1-249-417-11	CARBON	1K	5%	1/4W	
R203	1-249-437-11	CARBON	47K	5%	1/4W	
R204	1-249-417-11	CARBON	1K	5%	1/4W	
R205	1-249-423-11	CARBON	3.3K	5%	1/4W	
R206	1-249-426-11	CARBON	5.6K	5%	1/4W	
R207	1-247-834-11	CARBON	1.3K	5%	1/4W	
R208	1-249-418-11	CARBON	1.2K	5%	1/4W	
R209	1-249-423-11	CARBON	3.3K	5%	1/4W	
R210	1-247-834-11	CARBON	1.3K	5%	1/4W	
R211	1-247-887-00	CARBON	220K	5%	1/4W	
R212	1-249-417-11	CARBON	1K	5%	1/4W	
R213	1-249-441-11	CARBON	100K	5%	1/4W	
R214	1-249-441-11	CARBON	100K	5%	1/4W	
R215	1-249-424-11	CARBON	3.9K	5%	1/4W	
R216	1-247-842-11	CARBON	3K	5%	1/4W	
R217	1-247-822-11	CARBON	430	5%	1/4W	
R218	1-249-427-11	CARBON	6.8K	5%	1/4W	
R219	1-249-415-11	CARBON	680	5%	1/4W	
R220	1-249-429-11	CARBON	10K	5%	1/4W	
R221	1-249-428-11	CARBON	8.2K	5%	1/4W	
R222	1-249-421-11	CARBON	2.2K	5%	1/4W	
R223	1-249-429-11	CARBON	10K	5%	1/4W	
R224	1-249-417-11	CARBON	1K	5%	1/4W	
R225	1-249-420-11	CARBON	1.8K	5%	1/4W	
R226	1-247-842-11	CARBON	3K	5%	1/4W	
R227	1-249-411-11	CARBON	330	5%	1/4W	
R228	1-249-441-11	CARBON	100K	5%	1/4W	
R229	1-249-417-11	CARBON	1K	5%	1/4W	
R230	1-249-441-11	CARBON	100K	5%	1/4W	
R231	1-249-436-11	CARBON	39K	5%	1/4W	
R232	1-249-420-11	CARBON	1.8K	5%	1/4W	
R233	1-249-441-11	CARBON	100K	5%	1/4W	
R301 ⚠	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R302	1-249-429-11	CARBON	10K	5%	1/4W	
R303	1-249-423-11	CARBON	3.3K	5%	1/4W	
R304	1-247-834-11	CARBON	1.3K	5%	1/4W	
R305	1-249-435-11	CARBON	33K	5%	1/4W	
R306	1-249-433-11	CARBON	22K	5%	1/4W	
R307	1-249-409-11	CARBON	220	5%	1/4W	
R308	1-249-409-11	CARBON	220	5%	1/4W	
R309	1-249-429-11	CARBON	10K	5%	1/4W	

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Note:
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No	Part No.	Description				
R310	1-249-417-11	CARBON	1K	5%	1/4W	
R311	1-259-880-11	CARBON	2.2M	5%	1/4W	
R313	1-249-405-11	CARBON	100	5%	1/4W	
R314	1-249-409-11	CARBON	220	5%	1/4W	
R315	1-249-441-11	CARBON	100K	5%	1/4W	
R316	1-249-441-11	CARBON	100K	5%	1/4W	
R317	1-249-411-11	CARBON	330	5%	1/4W	
R318	1-249-437-11	CARBON	47K	5%	1/4W	
R319	1-215-469-00	METAL	100K	1%	1/6W	
R320	1-249-433-11	CARBON	22K	5%	1/4W	
R321	1-249-441-11	CARBON	100K	5%	1/4W	
R322	1-249-429-11	CARBON	10K	5%	1/4W	
R323	1-249-429-11	CARBON	10K	5%	1/4W	
R325	1-247-864-11	CARBON	24K	5%	1/4W	
R332	1-247-862-11	CARBON	20K	5%	1/4W	
R333	1-247-868-11	CARBON	36K	5%	1/4W	
R334	1-249-434-11	CARBON	27K	5%	1/4W	
R335	1-247-874-11	CARBON	62K	5%	1/4W	
R336	1-247-870-11	CARBON	43K	5%	1/4W	
R337	1-247-881-00	CARBON	120K	5%	1/4W	
R338	1-249-437-11	CARBON	47K	5%	1/4W	
R339	1-247-872-11	CARBON	51K	5%	1/4W	
R340	1-249-437-11	CARBON	47K	5%	1/4W	
R341	1-249-438-11	CARBON	56K	5%	1/4W	
R342	1-249-437-11	CARBON	47K	5%	1/4W	
R343	1-247-881-00	CARBON	120K	5%	1/4W	
R344	1-247-872-11	CARBON	51K	5%	1/4W	
R345	1-247-874-11	CARBON	62K	5%	1/4W	
R346	1-249-434-11	CARBON	27K	5%	1/4W	
R347	1-249-437-11	CARBON	47K	5%	1/4W	
R348	1-249-438-11	CARBON	56K	5%	1/4W	
R349	1-247-880-11	CARBON	110K	5%	1/4W	
R350	1-249-435-11	CARBON	33K	5%	1/4W	
R351	1-249-435-11	CARBON	33K	5%	1/4W	
R352	1-249-439-11	CARBON	68K	5%	1/4W	
R353	1-247-885-00	CARBON	180K	5%	1/4W	
R354	1-247-874-11	CARBON	62K	5%	1/4W	
R355	1-249-441-11	CARBON	100K	5%	1/4W	
R356	1-249-439-11	CARBON	68K	5%	1/4W	
R357	1-249-437-11	CARBON	47K	5%	1/4W	
R358	1-247-880-11	CARBON	110K	5%	1/4W	
R359	1-247-885-00	CARBON	180K	5%	1/4W	
R360	1-247-874-11	CARBON	62K	5%	1/4W	
R361	1-247-883-00	CARBON	150K	5%	1/4W	
R362	1-249-439-11	CARBON	68K	5%	1/4W	
R363	1-249-438-11	CARBON	56K	5%	1/4W	
R364	1-249-437-11	CARBON	47K	5%	1/4W	
R365	1-247-876-11	CARBON	75K	5%	1/4W	
R366	1-247-880-11	CARBON	110K	5%	1/4W	
R367	1-247-887-00	CARBON	220K	5%	1/4W	
R368	1-247-887-00	CARBON	220K	5%	1/4W	
R369	1-247-887-00	CARBON	220K	5%	1/4W	
R370	1-249-441-11	CARBON	100K	5%	1/4W	
R371	1-249-429-11	CARBON	10K	5%	1/4W	
R372	1-249-428-11	CARBON	8.2K	5%	1/4W	
R373	1-249-423-11	CARBON	3.3K	5%	1/4W	
R374	1-249-441-11	CARBON	100K	5%	1/4W	
R375	1-249-441-11	CARBON	100K	5%	1/4W	
R376	1-249-417-11	CARBON	1K	5%	1/4W	
R377	1-249-429-11	CARBON	10K	5%	1/4W	
R378	1-249-441-11	CARBON	100K	5%	1/4W	
R379	1-249-417-11	CARBON	1K	5%	1/4W	
R701 ⚠	1-219-108-11	FUSIBLE	1.5	5%	1W	F
R702	1-249-423-11	CARBON	3.3K	5%	1/4W	
R703	1-249-417-11	CARBON	1K	5%	1/4W	

Ref.No	Part No.	Description				
R704 ⚠	1-219-109-11	FUSIBLE	3.9	5%	1W	F
R705 ⚠	1-219-110-11	FUSIBLE	150	5%	1W	F
R706 ⚠	1-219-110-11	FUSIBLE	150	5%	1W	F
R707	1-249-425-11	CARBON	4.7K	5%	1/4W	
R708	1-249-417-11	CARBON	1K	5%	1/4W	
R709	1-249-419-11	CARBON	1.5K	5%	1/4W	
R710	1-249-428-11	CARBON	8.2K	5%	1/4W	
R711	1-249-420-11	CARBON	1.8K	5%	1/4W	
R712	1-249-431-11	CARBON	15K	5%	1/4W	
R713	1-249-399-11	CARBON	33	5%	1/4W	
R715	1-249-405-11	CARBON	100	5%	1/4W	
R716	1-249-405-11	CARBON	100	5%	1/4W	
R800	1-249-407-11	CARBON	150	5%	1/4W	
R801	1-249-429-11	CARBON	10K	5%	1/4W	
R802	1-247-903-00	CARBON	1M	5%	1/4W	
R803	1-249-420-11	CARBON	1.8K	5%	1/4W	
R804	1-249-425-11	CARBON	4.7K	5%	1/4W	
R805	1-249-417-11	CARBON	1K	5%	1/4W	
R806	1-249-433-11	CARBON	22K	5%	1/4W	
R807	1-249-421-11	CARBON	2.2K	5%	1/4W	
R808	1-249-425-11	CARBON	4.7K	5%	1/4W	
R809	1-249-393-11	CARBON	10	5%	1/4W	
R810	1-249-420-11	CARBON	1.8K	5%	1/4W	
R811	1-249-425-11	CARBON	4.7K	5%	1/4W	
R812	1-249-421-11	CARBON	2.2K	5%	1/4W	
R813	1-249-425-11	CARBON	4.7K	5%	1/4W	
R814	1-249-393-11	CARBON	10	5%	1/4W	
R815	1-249-420-11	CARBON	1.8K	5%	1/4W	
R816	1-249-425-11	CARBON	4.7K	5%	1/4W	
R817	1-249-417-11	CARBON	1K	5%	1/4W	
R818	1-249-421-11	CARBON	2.2K	5%	1/4W	
R819	1-249-421-11	CARBON	2.2K	5%	1/4W	
R820	1-249-421-11	CARBON	2.2K	5%	1/4W	
R824	1-249-425-11	CARBON	4.7K	5%	1/4W	
R825	1-249-425-11	CARBON	4.7K	5%	1/4W	
R826	1-249-425-11	CARBON	4.7K	5%	1/4W	
R827	1-249-425-11	CARBON	4.7K	5%	1/4W	
R828	1-249-437-11	CARBON	47K	5%	1/4W	
R829	1-249-425-11	CARBON	4.7K	5%	1/4W	
R830	1-249-437-11	CARBON	47K	5%	1/4W	
R831	1-249-425-11	CARBON	4.7K	5%	1/4W	
R832	1-249-437-11	CARBON	47K	5%	1/4W	
R833	1-249-429-11	CARBON	10K	5%	1/4W	
R834	1-247-895-00	CARBON	470K	5%	1/4W	
R835	1-247-895-00	CARBON	470K	5%	1/4W	
R836	1-249-413-11	CARBON	470	5%	1/4W	
R838	1-249-413-11	CARBON	470	5%	1/4W	
R839	1-249-407-11	CARBON	150	5%	1/4W	
R840	1-249-407-11	CARBON	150	5%	1/4W	
R841	1-249-407-11	CARBON	150	5%	1/4W	
R842	1-249-407-11	CARBON	150	5%	1/4W	
R843	1-249-407-11	CARBON	150	5%	1/4W	
R844	1-249-411-11	CARBON	330	5%	1/4W	
R845	1-249-413-11	CARBON	470	5%	1/4W	
R846	1-249-429-11	CARBON	10K	5%	1/4W	
R847	1-249-429-11	CARBON	10K	5%	1/4W	
R848	1-249-429-11	CARBON	10K	5%	1/4W	
R849	1-249-412-11	CARBON	390	5%	1/4W	
R851	1-249-416-11	CARBON	820	5%	1/4W	
R852	1-249-412-11	CARBON	390	5%	1/4W	
R853	1-249-411-11	CARBON	330	5%	1/4W	
R854	1-249-418-11	CARBON	1.2K	5%	1/4W	
R855	1-249-417-11	CARBON	1K	5%	1/4W	
R856	1-249-426-11	CARBON	5.6K	5%	1/4W	
R857	1-249-430-11	CARBON	12K	5%	1/4W	

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Note:
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No	Part No.	Description			
R858	1-249-407-11	CARBON	150	5%	1/4W
R859	1-249-409-11	CARBON	220	5%	1/4W
R860	1-249-411-11	CARBON	330	5%	1/4W
R862	1-247-832-11	CARBON	1.1K	5%	1/4W
R863	1-249-417-11	CARBON	1K	5%	1/4W
R864	1-249-420-11	CARBON	1.8K	5%	1/4W
R865	1-249-424-11	CARBON	3.9K	5%	1/4W
R866	1-249-430-11	CARBON	12K	5%	1/4W
R867	1-249-425-11	CARBON	4.7K	5%	1/4W
RV41A	1-228-989-00	RES, ADJ, CARBON 470			
RV41B	1-228-989-00	RES, ADJ, CARBON 470			
RV42	1-230-500-11	RES, ADJ, CARBON 220K			
RV61A	1-228-989-00	RES, ADJ, CARBON 470			
RV61B	1-228-989-00	RES, ADJ, CARBON 470			
RV62	1-230-500-11	RES, ADJ, CARBON 220K			
RV101	1-228-995-00	RES, ADJ, CARBON 22K			
RV201	1-228-995-00	RES, ADJ, CARBON 22K			
RY81	1-515-614-11	RELAY			
S11A	1-571-281-21	SWITCH, LEAF (HALF DET)			
S11B	1-571-281-21	SWITCH, LEAF (HALF DET)			
S12B	1-571-281-21	SWITCH, LEAF (ERASE PROOF (A))			
S13B	1-571-281-21	SWITCH, LEAF (ERASE PROOF (B))			
S14A	1-571-281-21	SWITCH, LEAF (CrO_2)			
S14B	1-571-281-21	SWITCH, LEAF (CrO_2)			
S15B	1-571-281-21	SWITCH, LEAF (METAL)			
S301	1-554-798-31	SWITCH, SLIDE (ISS)			
S302	1-570-835-11	SWITCH, SLIDE (DOLBY NR)			
S801	1-572-184-11	SWITCH, KEYBOARD (DECK A : □)			
S802	1-572-184-11	SWITCH, KEYBOARD (DECK A : ▷)			
S803	1-572-184-11	SWITCH, KEYBOARD (DECK A : ◁)			
S804	1-572-184-11	SWITCH, KEYBOARD (DECK A : ◀◀)			
S805	1-572-184-11	SWITCH, KEYBOARD (DECK A : ▶▶)			
S806	1-572-184-11	SWITCH, KEYBOARD (DECK B : □)			
S807	1-572-184-11	SWITCH, KEYBOARD (PAUSE)			
S808	1-572-184-11	SWITCH, KEYBOARD (DECK B : ▷)			
S809	1-572-184-11	SWITCH, KEYBOARD (DECK B : ◁)			
S811	1-572-184-11	SWITCH, KEYBOARD (DECK B : ◀◀)			
S812	1-572-184-11	SWITCH, KEYBOARD (DECK B : ▶▶)			
S813	1-572-184-11	SWITCH, KEYBOARD (REC)			
S814	1-572-184-11	SWITCH, KEYBOARD (ASM/BLANK SKIP)			
S815	1-572-184-11	SWITCH, KEYBOARD (HIGH SPEED)			
S817	1-572-184-11	SWITCH, KEYBOARD (CD SYNCHRO)			
S818	1-570-835-11	SWITCH, SLIDE (DIRECTION MODE)			
SPK101	1-235-186-00	ENCAPSULATED COMPONENT			
SPK201	1-235-186-00	ENCAPSULATED COMPONENT			
T81	1-433-337-11	TRANSFORMER, BIAS OSCILLATION			
X801	1-577-358-21	VIBRATOR, CERAMIC (4MHz)			

9-955-669-11
(Including 9-955-669-91)

Sony Corporation
Audio Group

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SS-H2500

SERVICE MANUAL

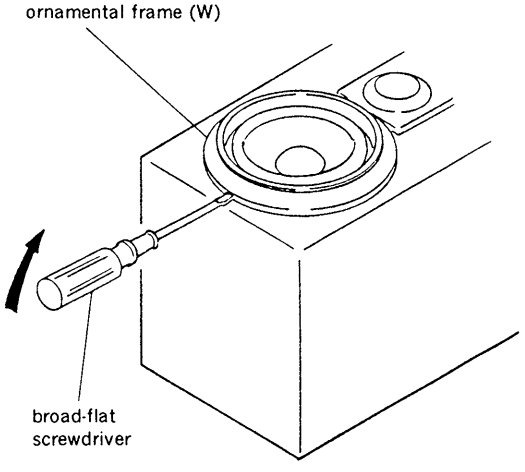
AEP Model
UK Model

This set is the speaker system in MHC-2300 and MHC-2500.

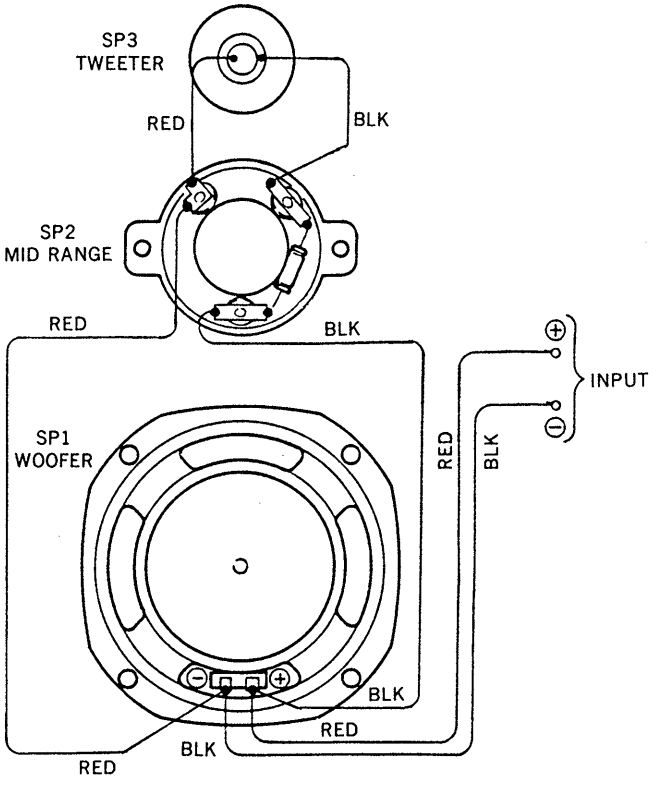
SPECIFICATIONS

Speaker system	2 way system
Speaker units	Woofer: 12 cm dia., cone type Tweeter: 5 cm dia., cone type
Enclosure type	Bass reflex
Frequency range	70 Hz – 20 kHz
Sensitivity	88 dB/W/m
Impedance	6 ohms
Dimensions	Approx. 195 x 285 x 220 mm (w/h/d) (7 3/4 x 11 1/4 x 8 3/4 inches)
Weight	Approx. 2.9 kg (6 lb 6 oz) net per speaker

1. ORNAMENTAL FRAME (W) REMOVAL



2. WIRING DIAGRAM



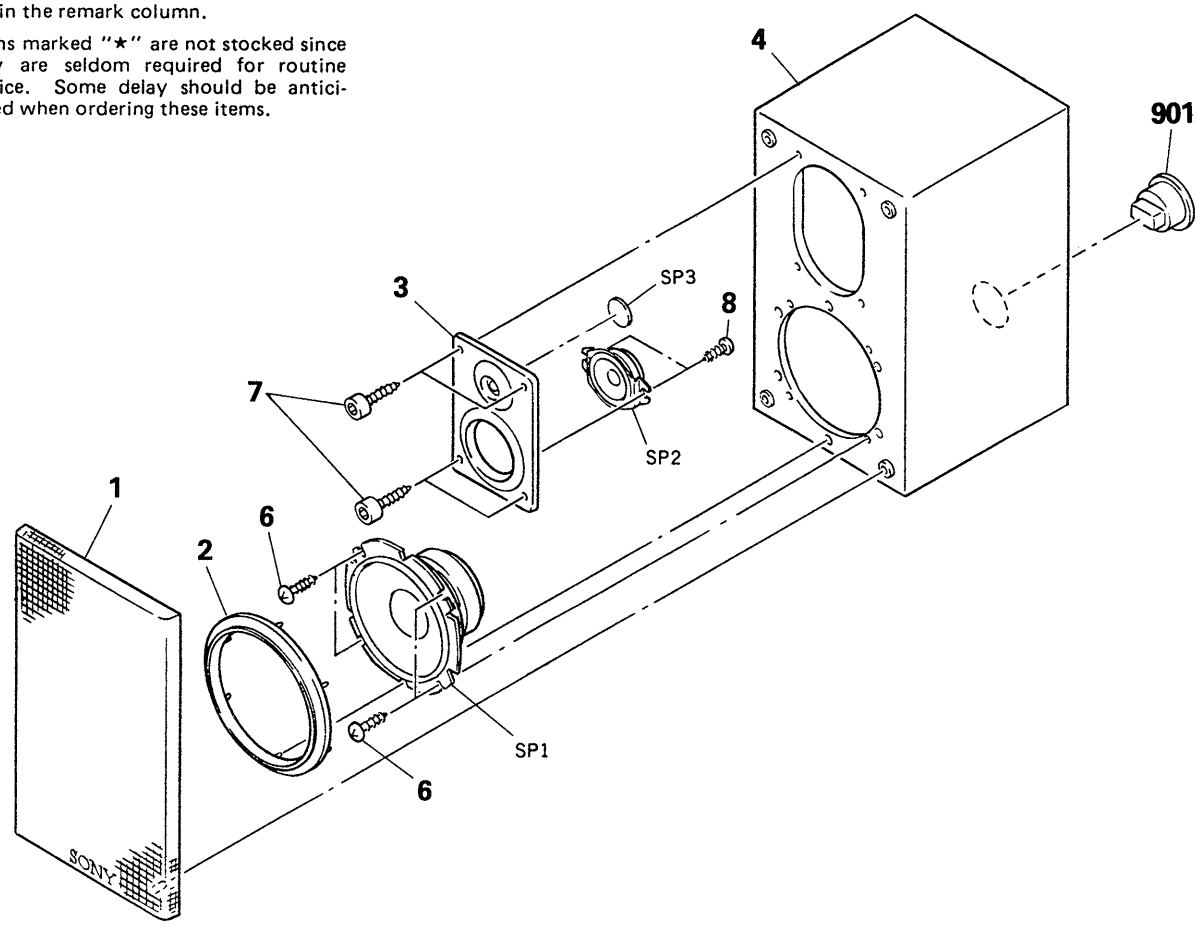
SPEAKER SYSTEM

SONY®

3. EXPLODED VIEW AND PARTS LIST

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



No.	Part No.	Description	Remarks
1	X-4929-630-1	FRAME ASSY, GRILLE	
2	4-932-415-02	FRAME (W), ORNAMENTAL	
3	X-4929-631-1	FRAME ASSY, ORNAMENTAL	
4	X-4929-628-1	(AEP,E,Italian)...CABINET ASSY, SPEAKER	
	X-4929-629-1	(West Germany)....CABINET ASSY, SPEAKER	
6	4-874-614-11	SCREW (4) (3.5X14), TAPPING	
7	4-932-425-01	SCREW (3.5X20), TAPPING	
8	7-685-645-79	SCREW +BVTP 3X6 TYPE2 IT-3	

No.	Part No.	Description	Remarks
901	1-537-145-11	TERMINAL BOARD (SPEAKER)	
SP1	1-544-277-11	SPEAKER (13CM)	
SP2	1-544-278-11	SPEAKER (5CM)	
SP3	1-544-293-11	SPEAKER (2CM)	

ACCESSORY & PACKING MATERIAL

	1-575-495-11	CORD, SPEAKER
	3-751-619-11	MANUAL, INSTRUCTION
*	4-857-137-01	CUSHION
*	4-938-402-01	INDIVIDUAL CARTON

9-955-770-11

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